949158

ASBESTOS AND LEAD BASED PAINT SURVEY

Project Site:
OMC Plant 2
100 East Sea Horse Drive
Waukegan, Illinois
Project # 1515.007.01

Prepared for:

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EDI
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APPENDICES

EXECUTIVE SUMMARY

Environmental Design International inc. (EDI) was retained by CH2M Hill to provide Engineering Support Services under USEPA contract EP-S5-06-01 (Remedial Action Contract), and Work Assignment number 020-RDRD-0528 OMC Plant 2 site. EDI has provided this asbestos and lead survey in agreement with CH2M Hill purchase order number 923049. The purpose of the inspection was to identify and quantify asbestos-containing materials (ACM) and lead-based painted (LBP) surfaces that could be impacted during the planned demolition of the building and recycling of building materials and machinery. The field inspection, which was conducted between September 24, 2007 and October 5, 2007, consisted of inspecting both interior and exterior portions of the OMC Plant 2 structure for ACM and LBP surfaces. A site visit for additional Quality Assurance/Quality Control (QA/QC) purposes was conducted on November 20, 2007.

Asbestos Inspection

After performing a visual inspection of building materials, EDI collected representative samples of suspect ACM and submitted those samples to a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory for analysis. Based on the results of bulk sample analysis, the following building materials identified in the areas of the proposed demolition of the OMC Plant 2 were verified to contain asbestos (greater than or equal to 1% asbestos content by volume):

Building Interior

- Tan w/spots, Beige, Tan w/brown, Green w/white - 12” x 12” floor tiles and mastics
- Tan w/ white, tan, Gray w/dots, Gray w/ white streaks, and Gray - 9” x 9” floor tiles and mastics
- 2”,4”,6”,8”, 10” Pipe insulation coverings and fittings
- Duct/HVAC insulation
- Boiler insulation and gaskets
- Lab table tops
- Transite wall coverings
- Fire Doors

Building Exterior

- Door caulks and glazings
- Window caulks and glazings
- Roof caulks and flashings
- Transite siding

The presence of ACM in the OMC Plant 2 requires that abatement of friable and potentially friable ACM be performed prior to demolition. An asbestos abatement design is not required under USEPA National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations; however, EDI recommends that an asbestos abatement design be developed by a licensed Illinois Department of Public Health (IDPH) asbestos project designer. Abatement

protocol should conform to the work practices outlined by the IDPH, Occupational Safety and Health Administration (OSHA), NESHAP and other applicable federal and local regulations.

Lead Inspection

EDI performed a visual inspection of painted building components within the OMC Plant 2. Painted surfaces were tested by using an X-Ray Fluorescence (XRF) Spectrum Analyzer and by collection of paint chip samples from representative areas. Based on the results of XRF testing and laboratory analysis of paint chip samples, LBP was detected in the following building components:

Building Interior

- All Bay Doors and Casings (Green and Brown)
- Ceiling Beam (Brown, White, Beige, and Gray ceiling rafters throughout)
- Metal Door and Casing (Green, Beige, Brown, and Yellow)
- Concrete Floor (Yellow and Red)
- Yellow Guardrail and Handrail
- I-Beam (Yellow, Green, Gray, White, Beige, and Brown)
- I-Beam horizontal (Beige and Gray)
- I-Beam structural (Gray)
- Green locker
- Yellow ladder
- Yellow machinery
- Pipe (Brown, White, and Yellow)
- Ramp/Dock (Rust)
- Stair Handrail and Stringer (Yellow)
- Stair Treads (Gray)
- Wall (Red, Brown, Beige, Green, Gray, and White)
- Wall Guards (Gray)
- Window Casings (White and Green)

Exterior

- Bay Doors (Brown and White)
- Crane Frame (Yellow)
- Doors (Green and White)
- Walls (Beige)
- Window Moldings (Green)
- Door Casings (Beige, Brown, and Green)
- Window Casings (Beige and White)
- Pipe (Yellow)
- Bay Door Casings (White)
- Stair Stringer (Green)

Workers who handle LBP coated building components must be protected from exposure following OSHA regulations. Typically LBP that is adhered to construction debris does not

require additional mitigation or abatement and can be disposed of as construction waste. However, building material recycling may present alternative handling methods that require limited or extensive mitigation or abatement prior to acceptance of the building material for recycling.

EDI recommends that a lead-based paint abatement project design be developed by a licensed IDPH lead risk assessor for any LBP that is to be removed during the demolition project. Abatement protocol shall conform to the work practices outlined by IDPH, OSHA, and other applicable federal and local regulations. Abatement protocol may be determined by the vender accepting the material for recycling or disposal.

1.0 INTRODUCTION

Environmental Design International inc. (EDI) was retained by CH2M Hill to provide Engineering Support Services under USEPA contract EP-S5-06-01 (Remedial Action Contract), and Work Assignment number 020-RDRD-0528 OMC Plant 2 site. EDI has provided this asbestos and lead survey in agreement with CH2M Hill Purchase order number 923049. The field inspection, which was conducted between September 24, 2007 and October 5, 2007, consisted of inspecting both interior and exterior portions of the OMC Plant 2 structure for ACM and LBP surfaces. As part of this inspection, EDI collected representative samples of suspect ACM and submitted those samples to a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory for analysis. Painted surfaces were analyzed using an XRF instrument and paint chip samples were also collected from representative areas.

The inspection was conducted by IDPH licensed Asbestos Building Inspectors and Lead Inspector/ Risk Assessors (Employee Licenses and Certifications are presented in Appendix F). EDI field staff included:

- Mr. Douglas McCormick, Asbestos Building Inspector, IDPH license #100-08904, and Lead Inspector, IDPH license #L-010964;
- Mr. Randy Livingston, Asbestos Building Inspector, IDPH license #100-01934, and Lead Risk Assessor, IDPH license # L-003274;
- Mr. Lynwood Slaughter, Asbestos Building Inspector, IDPH license #100-02914, and Lead Risk Assessor, IDPH license #L-004893.

1.1 Site Location and Property Description

The OMC Plant 2 is a former manufacturing facility, located at 100 East Sea Horse Drive in Waukegan, Illinois. The building is a predominantly one story open air manufacturing plant with a two story office space portion on the south central side. The facility building is approximately 600,000 square feet and is primarily constructed of brick, masonry and structural steel set on a concrete slab. The building, legally abandoned since 2002, was primarily used as manufacturing space, with some areas building being used for office, laboratory and medical facilities.

1.2 Project Background and Purpose

Background

The Outboard Marine Corporation (OMC) Superfund site is located at the upper Waukegan Harbor area in Waukegan, Illinois. Figure 1 is a Site Location Map. OMC filed for bankruptcy protection under Chapter 11 in December 2000 and ceased operations at the plant building. OMC designed, manufactured, and sold outboard marine engines, parts, and accessories to a worldwide market for many years. OMC Plant 2 has been contaminated by PCBs (polychlorinated biphenyls) and chlorinated solvents.

The OMC Plant 2 building interior has numerous rooms and steel mechanisms (i.e. metal crane) that were considered part of the building materials and included in the survey. The survey was

conducted from the east end of the building to the west end of the building. EDI developed a Health and Safety Plan (HASP) for the survey work and considered the west end of the building the exclusion zone.

Asbestos Inspection

The purpose of the asbestos inspection was to identify and quantify ACM within the proposed building demolition area, which includes interior and exterior areas of the first and second stories of the building.

Lead-Based Paint Inspection

The purpose of the LBP inspection was to identify and quantify the presence of LBP surfaces within the proposed demolition area. Building materials to be recycled were included in the inspection so that prior to recycling, LBP can be identified and removal and disposal options evaluated according to applicable regulations.

2.0 ASBESTOS INSPECTION

The asbestos inspection of the OMC Plant 2 was performed in accordance with the U.S. Environmental Protection Agency (EPA) guidance document *Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials* (EPA 560/5085-030a, 1985). Please refer to Appendix B for a complete list of suspect ACM identified during the inspection.

2.1 Asbestos Inspection Methodology

EDI performed a visual examination of each room and area of both the interior and exterior of the building, including walls, floors, and ceilings, in order to identify homogeneous areas of suspected ACM. Homogeneous areas are materials that are similar in color, texture, and general appearance as determined by site observations by experienced asbestos building inspectors. EDI conducted the visual inspection and sampling from the east end of the building to the west end. The exclusion zone was sampled last to minimize cross contamination to other parts of the building.

The exclusion zone was identified as an area with concentrations of PCBs in the concrete and on the superstructure exceeding Toxic Substances Control Act (TSCA) requirements based on the results of the remedial investigation. The exclusion zone was located on the west portion of the building. The other areas of the building were identified as having lower levels of PCBs contamination or no contamination. During the ACM and LBP inspections, EDI wore personal protective equipment (PPE) in accordance with the site HASP. All used PPE was contained and remains on site for disposal. Any rental equipment or machinery used at the site was wet wiped clean.

EDI collected bulk asbestos samples using wet sampling methods and a coring device or sample cutter, as appropriate, to collect a cross-section of the suspect material. Sample collection tools were decontaminated between samples by washing with soap and water and dried by disposable towels to avoid cross contamination.

EDI placed each sample into a clean and unused bag marked with a unique sample identification number (for example, OMC-31). For each sample, the identification number, a brief material description, location, condition and estimated quantity of material type were recorded on a bulk sample log sheet. Estimated quantities of ACM are included in Table 3.

Proper chain-of-custody procedures were followed for this inspection. These procedures provide a written tracking mechanism that lists the person responsible for the sample from collection to delivery to the laboratory. Sample identification numbers and material descriptions were recorded on the chain-of-custody forms.

All samples were analyzed by Environmental Design International Inc. Laboratory, accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). Samples were analyzed using Polarized Light Microscopy (PLM) and supplemented with dispersion staining. PLM is an EPA-approved method, which utilizes a light microscope equipped with polarized filters (EPA

Method 600/R-93/116). All samples analyzed by EDI will be returned to the site, in a sealed container, to be properly disposed of during the abatement project.

It should be noted that some materials may not be accurately identified and/or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is a more definitive analysis of these materials. Floor tile samples that tested negative by PLM were submitted to a laboratory to be analyzed by TEM as noted in Table 1.

2.2 Asbestos Inspection Results

The suspect materials sampled and analytical results for asbestos content are summarized in Table 1. The EPA defines ACM as a material that contains greater than 1% asbestos by PLM analysis. Drawings depicting confirmed ACM and homogeneous materials within the survey area are provided in Appendix A. Bulk sample analytical results are provided in Appendix B.

Table 1 – Suspect Asbestos Containing Materials

Sample No.	Materials	Sample Location	Material Locations	Positive	Negative
OMC 1-3	9”x9” Gray w/ dots Floor Tile	East, Center, South	Office in medical department/ west wall	X	
OMC 4-6	9”x9” Gray w/dots Floor tile mastic	East, Center, South	Office in medical department/ west wall		X
OMC 7-9	9”x9” Gray w/White streaks Floor Tile	North, Center, South	Medical department throughout east side/ west side, multi layer east side Area 23	X	
OMC 10-12	9”x9” Gray w/White streaks Floor Tile Mastic	North, Center, South	Medical department throughout east side/west side, multi layer east side Area 23	X	
OMC 13-15	12”x12” Green w/ White Floor Tile	West, Center, East	Medical department east side/multilayer	X	
OMC 16-18	12”x12” Green w/ White Floor Tile Mastic	West, Center, East	Medical department east side/multilayer		X
OMC 19-21	12”x12” Tan w/ Spots Floor Tile	South, North, Center	Office in medical department west wall, office by crane/ office 11, 11f, 11g, 11h	X	
OMC 22-24	12”x12” Tan w/ Spots Floor Tile Mastic	South, North, Center	Office in medical department west wall, office by crane/ office 11, 11f, 11g, 11h		X

Table 1 – Suspect Asbestos Containing Materials (Continued)

Sample No.	Materials	Sample Location	Material Locations	Positive	Negative
OMC 25-27	12”x12” Beige Floor Tile	East, West Center	West wall Office/ medical department, ladies toilet area 24, men’s toilet area 25, toilets in exclusion zone		X
OMC 28-30	12”x12” Beige Floor Tile Mastic	East, West Center	West wall Office/ medical department, ladies toilet area 24, mens toilet area 25, toilets in exclusion zone	X	
OMC 31-33	12”x12” Tan Floor Tile	N.W., S.W., Center	Offices in exclusion zone, guard house, floor outside locker room 2, Area 4 office.	X	
OMC 34-36	12”x12” Tan Floor Tile Mastic	N.W., S.W., Center	Offices in exclusion zone, guard house, floor outside locker room 2, Area 4 office.		X
OMC 37-39	12”x12” Tan w/ Brown Floor Tile	Center, east West	Office by S.E. Docks, Exclusion Zone office area, Department 202 polishments, Office area 17A, Receiving office.	X	
OMC 40-42	12”x12” Tan w/ Brown Floor Tile Mastic	Center, east West	Office by S.E. Docks, Exclusion Zone office area, Department 202 polishments, Office area 17A, Receiving office.		X
OMC 43*-45	12”x12” Beige w/ Streaks Floor Tile	North, South Center	Records office, corporate office area/ slop sink, office 11A		X
OMC 46-48	12”x12” Beige w/ Streaks Floor Tile Mastic	North, South Center	Records office, corporate office area/ slop sink, office 11A		X
OMC 49-51	Dark Brown Carpet Mastic	North, Middle South	Bridge to corporate office, front office east medical department		X
OMC 52-54	Black Paper backing on 1’x2’ Metal Pan Ceiling Tile	N.W. Corner, Center South	Chemical Lab, Lunch Room, Medical Department		X
OMC 55-57	Brown Carpet Mastic	Entrance, Common Area, Office	Throughout corporate office area/ human resource office, exclusion zone		X
OMC 58-60	2” Brown Vinyl Baseboard	North wall, South wall, East wall	Medical department, lunchroom, corporate office area		X
OMC 61-63	2” Brown Vinyl Baseboard Mastic	North wall, South wall, East wall	Medical department, lunchroom, corporate office area		X
OMC 64-66	Black Vinyl Baseboard	East, West Center	Corporate office area		X
OMC 67-69	Black Vinyl Baseboard Mastic	East, West Center	Corporate office area		X
OMC 70-72	Gray Vinyl Baseboard	Center, S.W. wall, N.E. wall	Exclusion zone, ladies locker room		X
OMC 73-75	Gray Vinyl Baseboard Mastic	Center, S.W. wall, N.E. wall	Exclusion zone, ladies locker room		X

Table 1 - Suspect Asbestos Containing Materials (Continued)

Sample No.	Materials	Sample Location	Material Locations	Positive	Negative
OMC 76-78	1'x1' Pinhole Ceiling Tile	Center, North, South	Throughout guard house, throughout offices in plant, medical department		X
OMC 79-81	2'x4' Pinhole Ceiling Tile	East, West, Center	Offices in plant, exclusion zone, workout room, toilets		X
OMC 82-84	2'x2' Ceiling Tile	North, South, Center	Dock receiving office		X
OMC 85-87	Brown Paper Backing on 1'x2' Metal Ceiling Tile	Center, North, South	Chemical lab, lunch room, medical department		X
OMC 88-90	Mirror Mastic	Center, East West	Exclusion zone, work out room		X
OMC 91-95	Drywall/ Tape/ Joint Compound	North wall, South wall, East wall	Corporate office area, corporate office toilets, medical department, chemical lab		X
OMC 96-98	Sink Caulk	Top of sink	Corporate office toilets		X
OMC 99-101	Black Lab Tops	North work station, South	Chemical Lab	X	
OMC 102-104	Black Lab Top Mastic	North work station, South	Chemical Lab		X
OMC 105-107	Laminate Countertop	Top of counter	Men/Women toilets, corporate office area		X
OMC 108-110	1"x1" Ceramic Flooring Grout	Center, North, South	Toilets throughout plant area		X
OMC 111-113	4"x4" Ceramic Wall Grout	East, Center, West	Under carpet exclusion zone, workout room, locker room area		X
OMC 114-116	Corrugated Interior Transite Panels	South, Center, North wall, Mechanical Room	Outer wall of bridge, Mechanical room over staircase, over supply crib, area 15 steam cylinder room	X	
OMC 117-119	Flat Interior Transite Panels	South, Center, North wall, Mechanical Room	Outer wall of bridge, Mechanical room over staircase, over supply crib, area 15 steam cylinder room	X	
OMC 120-122	Spray on Material	North, South, Ceiling Beam	Walls and beams mechanical room, above spiral staircase		X
OMC 123-125	2" Fiberglass Canvas Wrap	Ceiling , locker room 2, mechanical room over staircase	Mechanical Rooms, pipe chases throughout boiler rooms, ceiling throughout plant work area		X
OMC 126-128	Hard Fittings on 2" Fiberglass TSI	Boiler rooms, mech rooms,pipe chases throughout bldg	Mechanical Rooms, pipe chases throughout boiler rooms, ceiling throughout plant work area	X	

Table 1 – Suspect Asbestos Containing Materials (Continued)

Sample No.	Materials	Sample Location	Material Locations	Positive	Negative
OMC 129-131	4” Cardboard TSI	Locker Rms 2&7, Mech Rm over Medical Dept..	Throughout plant area, pipe chases throughout mechanical rooms, pipe chases medical department, front office east, chemical lab	X	
OMC 132-134	Hard Fittings on 4” Fiberglass TSI	Locker Rms 2&7. Mech rm over Med Dept	Ceiling and associated piping throughout locker rooms, pipe chases, boiler rooms	X	
OMC 135-137	4” Aircell TSI	East wall, mechanical room by supply crib, Ceiling	Bridge to corporate offices, mechanical rooms throughout plant area and associated piping	X	
OMC 138-140	Hard Fittings on 4” Aircell TSI	East wall mechanical room by supply crib, Ceiling	Bridge to corporate offices, mechanical rooms throughout plant area and associated piping	X	
OMC 141-143	4” Fiberglass Canvas Wrap TSI	East wall mech rm by sup crib ceiling	Ceiling above plant work area, pipe chases, mechanical rooms, boiler rooms		X
OMC 144-146	Hard Fittings on 4” Fiberglass TSI	East wall mech rm by supply crib ceiling	Ceiling above plant work area, pipe chases, mechanical rooms, boiler rooms	X	
OMC 147-149	6” Cardboard TSI	Mechanical rooms, roof drains, perimeter wall piping	Roof drains plant area throughout, mechanical room, over medical department ceiling plant work area throughout	X	
OMC 150-152	Hard Fittings on 6” Cardboard TSI	Mechanical rooms, roof drains, perimeter wall piping	Roof drains plant area throughout, mechanical room, over medical department ceiling plant work area throughout	X	
OMC 153-155	6” Aircell TSI	Mechanical rooms, roof drains, perimeter wall piping	Mechanical rooms pipe chases, locker rooms, ceiling throughout plant work area	X	
OMC 156-158	Hard Fittings on 6” Aircell TSI	Mechanical rooms, roof drains, perimeter wall piping	Mechanical rooms pipe chases, locker rooms, ceiling throughout plant work area	X	
OMC 159-161	6” Fiberglass Canvas Wrap TSI	Mechanical rooms, roof drains, perimeter wall piping	Pipe chases, locker rooms, ceiling in plant throughout work areas		X
OMC 162-164	Hard Fittings on 6” Fiberglass TSI	Mechanical rooms, roof drains, perimeter wall piping	Pipe chases, locker rooms, ceiling in plant throughout work areas	X	
OMC 165-167	10” Mag Block TSI	Mechanical rooms, roof drains, perimeter wall piping	Ceiling perimeter pipes area 11, area 30/steam cylinder room	X	

Table 1 – Suspect Asbestos Containing Materials (Continued)

Sample No.	Materials	Sample Location	Material Locations	Positive	Negative
OMC 168-170	Hard Fittings on 10" Mag Block TSI	Mechanical rooms, roof drains, perimeter wall piping	Ceiling perimeter pipes area 11, area 30/steam cylinder room	X	
OMC 171-173	10" Fiberglass Canvas Wrap TSI	Mechanical rooms, roof drains, perimeter wall piping	Area 14 tank clarifier room, area 15 steam cylinder rooms/ throughout plant work area		X
OMC 174-176	Hard Fittings on 10" Fiberglass TSI	Mechanical rooms, roof drains, perimeter wall piping	Area 14 tank clarifier room, area 15 steam cylinder rooms/ throughout plant work area	X	
OMC 177-179	Hard Fittings on 8" Aircell TSI	Mechanical rooms, roof drains, wall piping	Ceiling above corporate office area, mechanical rooms, ceiling plant work area	X	
OMC 180-182	Canvas Wrap on Ceiling Level AHU's	Area 11, Area 30, Area 6	Throughout plant area	X	
OMC 183-185	TSI on Mechanical Room AHU	Area 11, Area 30, Area 6	Medical department mechanical room, chemical lab mechanical room, supply crib mechanical room		X
OMC 186-188	Brown Duct TSI	Area 11, Area 30, Area 6	Medical department mechanical room, chemical lab mechanical room, locker rooms, supply crib mechanical room, throughout plant work area.	X	
OMC 189-191	Gray Duct TSI	Area 11, Area 30, Area 6	Mechanical rooms, medical department, chemical lab		X
OMC 192-194	Mechanical Room Duct TSI	Area 11, Area 30, Area 6	Mechanical rooms, above staircase, above supply crib, above medical department, throughout plant work area	X	
OMC 195-197	Brown Caulk on Ducts	Front office, rear office, common area	Duct work above ceiling in corporate office area		X
OMC 198-200	Vibration Cloth	Front office, rear office, common area	Throughout locker rooms, mechanical rooms		X
OMC 201-203	Boiler TSI	Boiler 1 Boiler 2	Boiler room, exclusion zone		X
OMC 204-206	Boiler Door Gaskets	Doors	Boiler room by fire zone J sign	X	
OMC 207-209	AHU Access Door Gaskets	Doors	Mechanical rooms	X	
OMC 210-212	Furnace Door Gaskets	Doors	Area 11, near offices col. 192, near washers 1 and 2	X	
OMC 213-215	Storage Tank A TSI	Front, Side, Rear	Ceiling area by exclusion zone	X	

Table 1 – Suspect Asbestos Containing Materials (Continued)

Sample No.	Materials	Sample Location	Material Locations	Positive	Negative
OMC 216-218	Storage Tank B TSI	Front, Side, Rear	South wall, area 11		X
OMC 219-221	Storage Tank C TSI	Front, Side, Rear	Tank in locker room	X	
OMC 222-224	Corrugated Exterior Transite Panels	East, West, North	Throughout all elevations	X	
OMC 225-227	Flat Exterior Transite Panels	East, West, North	Throughout all elevations	X	
OMC 228-230	Press Board Behind Exterior Transite Panels	Overhead garage/dock door area	Throughout all elevations		X
OMC 231-233	Caulk on Exterior Transite Panels	Overhead garage/dock door area	Throughout all elevations	X	
OMC 234-236	Caulk on Aluminum Siding	Overhead garage/dock door area	West elevations	X	
OMC 237-239	Caulk on Large Concrete Blocks	East North South Elevations	Seams of concrete foundation blocks exterior perimeter	X	
OMC 240-242	Expansion Joints on Large Concrete Blocks	Overhead garage/dock door area	Wall adjacent to overhead door, mobile office area	X	
OMC 243-245	Caulk on Metal Trough	East, North East, South East Elevations	East side of building exterior Overhead garage doors	X	
OMC 246-248	Door Caulk	East, West, North	Exterior doors all elevations	X	
OMC 249-251	Overhead Garage Door Caulk	Top of door, North and South side of door	Area 1 Mobile Office, dock area	X	
OMC 252-254	Ventilation Grill Caulk	Perimeter of Grill	East side of building exterior	X	
OMC 255-257	Metal Building Roof Drain Caulk	South North West Elevations	Roof elevation	X	
OMC 258-260	Glass Door Frame Caulk	East, West North	South elevation	X	
OMC 261-263	Window Caulk on Large Multi-Pane Windows	East, South, West	All elevations	X	
OMC 264-266	Window Caulk on Small Windows	North, South, East	All elevations		X
OMC 267-269	Window Glazing on Large Multi-Pane Windows	North, South, East	All elevations		X

Table 1 – Suspect Asbestos Containing Materials (Continued)

Sample No.	Materials	Sample Location	Material Locations	Positive	Negative
OMC 270-272	Window Glazing on Small Windows	East, North, West	All elevations	X	
OMC 273-275	Old Brick Mortar	North South Center	North Elevation		X
OMC 276-278	Red Brick Mortar	North South Center	East Elevation		X
OMC 279-281	Cinder Block Mortar	North South Center	West Elevation		X
OMC 282-284	Cinder Block	North South Center	West Elevation		X
OMC 285-287	Gray Textured Coating on Walls and Windows	East West Center Elevations	South Elevation		X
OMC 288-290	Gasket on Exterior Upright Tank	Top, North and South sides	East Elevation	X	
OMC 291-293	Green Debris Near NW Ramp	Front and sides of Ramp	North Elevation	X	
OMC 294-296	2" Cardboard TSI	Risers to roof ceiling pipe runs	Area 1 Mobile office. Risers by access to roof Assoc with ceiling pipe	X	
OMC 297-299	Red Caulk on Roof Fan Units	Center North and South locations on roof	Main Roof Elevation Throughout the building		X
OMC 300-302	Caulk on Roof Electrical Units	West East Center of Roof	Main Roof Elevation Throughout the building	X	
OMC 303-305	Caulk on Roof Ventilation Units	South, North, Northwest Elevations	Main Roof Elevation Throughout the building		X
OMC 306-308	Caulk on Roof Pipe Penetrations	North, South, Center Elevations	Main Roof Elevation Throughout the building	X	
OMC 309-311	Caulk on Roof Square Air Intake	East ,West South East Elevations	Main Roof Elevation Throughout the building	X	
OMC 312-314	45 Degree Roof Fan Unit Caulk	North, South Elevations	Main Roof Elevation Throughout the building	X	
OMC 315-317	Tar Caulking on Roof Units	East ,West North Elevations	Main Roof Elevation Throughout the building	X	
OMC 318-320	Window Glazing on Skylights	Center, North, South Elevations	Main Roof Elevation Throughout the building	X	
OMC 321-323	Fireboard Panels in Roof Electrical Units	West, East Center of Panels	Main Roof Elevation Throughout the building		X
OMC 324-326	Vibration Cloth on Roof Units	South, East West Elevations	Main Roof Elevation Throughout the building		X

Table 1 – Suspect Asbestos Containing Materials (Continued)

Sample No.	Materials	Sample Location	Material Locations	Positive	Negative
OMC 327-329	Gaskets on AHU Roof Doors	Top, Sides, Bottom of doors	Main Roof Elevation Throughout the building	X	
OMC 330-336	Gray Textured Coating over Foam	East ,West, South Elevations	Main Roof Elevation Throughout the building		X
OMC 337-343	Roof Material under Foam	East, West, South Elevations	Main Roof Elevation Throughout the building		X
OMC 344-346	Built-up Roof Field Material- Office Area	Center , North, South Elevations	Main Roof Elevation Throughout the building		X
OMC 347-349	Flashing on Built-up Roof Material	South, North West Elevations	Main Roof Elevation Throughout the building	X	
OMC 350-352	Coping Caulk	East, North West Elevations	Main Roof Elevation Throughout the building		X
OMC 353-355	9”x9” Tan w/ White Floor Tile	East, Center South	Chemical Lab	X	
OMC 356-358	9”x9” Tan w/ White Floor Tile Mastic	East, Center South	Chemical Lab	X	
OMC 359-361	1’x1’ Laminated Ceiling Tile	North, South, Center	Chemical Lab Northeast Entrance		X
OMC 362-364	2’x 2’ Lava Rock White Ceiling Tile	Common Area Front Offices	Corporate Office Area		X
OMC 365-367	9”x 9” Tan Floor Tile	East, West Center	Lunchroom	X	
OMC 368-370	9”x 9” Tan Floor Tile Mastic	East ,West Center	Lunchroom	X	
OMC 371*-373	12”x12” Multicolor Floor Tile	East, West Center	Front Doctor’s office Medical Dept under carpet	X	
OMC 374-376	12”x12” Multicolor Floor Tile Mastic	East, West Center	Front Doctor’s office Medical Dept under carpet		X
OMC 377* - 379	12”x12” White w/Brown Floor Tile	Front Hall, Entrance to Work out room	Locker Room Hallway & Entrance to work out room Exclusion Zone		X
OMC 380-382	12”x12” White w/Brown Floor Tile Mastic	Front Hall, Entrance to Work out room	Locker Room Hallway & Entrance to work out room Exclusion Zone		X
OMC 383-385	Material under 12”x12” Multicolor Floor Tile	Center , North South	Off Front East side of Medical department		X
OMC 386-388	Brown Carpet Mastic HR Exclusion Zone	East, West Center	Human Resources Department		X

Table 1 – Suspect Asbestos Containing Materials (Continued)

Sample No.	Materials	Sample Location	Material Locations	Positive	Negative
OMC 389-391	Material under Carpet in Med Dept	Center , North South	Front Doctor's Office		X
OMC 392-394	1'x1' Splash Design Ceiling Tile	Central North South	Medical Department Office by Boiler room Fire Zone J		X
OMC 395-397	1'x1' Splash Design Ceiling Tile Mastic	Central North South	Medical Department Office by Boiler room Fire Zone J		X
OMC 398-400	Transite Material from Electrical Panel Boxes	Area6, Area30, Area11	Throughout Plant work areas	X	
OMC 401-403	4" Vinyl Baseboard	Central North South	Throughout Perimeter walk Offices; 11F-11G, 11H		X
OMC 404-406	4" Vinyl Baseboard Mastic	Central North South	Throughout Perimeter walk Offices; 11F-11G, 11H		X
OMC 407-409	9"x 9" Gray Floor Tile	North Central South	Exclusion Zone Office	X	
OMC 410-412	9"x 9" Gray Floor Tile Mastic	North Central South	Exclusion Zone Office	X	
OMC 413-415	Heating Unit Insulation	Front ,Sides, Top of Units	Throughout mechanical rooms	X	
OMC 416-418	Boiler Door Gasket Exclusion Zone Area	Doors	Fire Zone J Boiler Room		X
OMC 419-421	8" Aircell TSI	North Central South	Above Ceiling Corporate Office Area		X
OMC 422-424	Window Caulk Office Area	North Central South	South Elevation Corporate Office Area		X
OMC 425-427	Window Glaze Office Area	North Central South	South Elevation Corporate Office Area		X
OMC 428-430	Dark Brown- Duct Wall Penetration Caulk	East office Area West	Corporate Office Area above Ceiling		X
OMC 431-433	Drywall/Tape Joint Compound Med Department	West Walls, Cubicles	Offices West Wall Cubicles in Center of Office		X
OMC 434-436	Hard Fittings on 2" Cardboard TSI	Roof Access, Ceil Pipe runs ,Pipe Chases	Area 1 Mobile Office Area by Roof Access, pipe chases, ceiling AHU	X	

Table 1 – Suspect Asbestos Containing Materials (Continued)

Sample No.	Materials	Sample Location	Material Locations	Positive	Negative
OMC 437-439	Leveling Compound	Center North South	Area 5 Storage Area, Walkways throughout Plant Work area.		X
OMC 440-442	Concrete Slab Material	Top, Bottom Side of Slab	East and South Elevations		X
OMC 443-445	Insulated Fire Doors	North, East, West	Throughout Facility	X	
OMC 446-448	Ceramic Blocks – Electrical System	North, East, West	Throughout Facility		X
OMC 449-451	Stored Boiler Insulation (Labeled "Asbestos Free")	Room 6A	On pallets in Room 6A		X
OMC 452-454	Stored Boiler Insulation (John Mansville Brand)	Room 6A	On pallets in Room 6A		X

* Indicates sample was analyzed by TEM Chatfield methods

2.3 Applicable Regulations

EPA's National Emission Standard for Hazardous Air Pollutants (NESHAP) (40 CFR 61, Subpart M) categorizes asbestos-containing thermal system insulation (TSI) and sprayed-on or troweled-on asbestos as regulated ACM (RACM). Miscellaneous materials (floor tile and floor tile mastic) are classified as Category I Non-Friable Asbestos; and transite material is classified as Category II Non-Friable Asbestos, unless the material is made friable during demolition. Friable ACM is material that can be crumbled, pulverized, or reduced to a powder by hand.

NESHAP requires at least ten working days' notification prior to any renovation or demolition activity that will disturb greater than 160 square feet or 260 linear feet of ACM materials. ACM removed during abatement must be disposed of at a landfill approved by the EPA to receive asbestos wastes.

IDPH requires that an Illinois-licensed abatement contractor perform removal of ACM from the interior of facilities located within the State of Illinois. In addition, personnel performing the asbestos removal must be Illinois-licensed workers overseen by an Illinois-licensed supervisor. An IDPH-licensed Asbestos Project Designer should design the abatement of ACM, although no design is required under NESHAP regulations.

The Occupational Safety and Health Administration (OSHA) Construction Industry Standard (29 CFR 1926.1101) categorizes the removal of spray-on asbestos or TSI as Class I removal work and the removal of flooring and transite materials as Class II removal work. Specific requirements for the removal of Class I and Class II materials include, but are not limited to, regulated work areas, air monitoring, engineering controls, work practices, personal protective equipment, notification and training.

The U.S. Department of Transportation (DOT) and Illinois Department of Transportation (IDOT) require special procedures for packaging, labeling and transportation of asbestos wastes

to disposal facilities. Other regulations may apply depending upon the contractor's means and methods.

2.4 Quality Assurance/Quality Control

EDI collected Quality Assurance/Quality Control (QA/QC) samples of suspect asbestos materials sampled, as part of the OMC Plant 2 inspection scope of work. EDI collected a duplicate sample immediately adjacent to every thirtieth sample collected or approximately every tenth homogeneous material. QA/QC Samples were labeled with a unique sample number and submitted for PLM analysis by an NVLAP approved laboratory. The duplicate samples collected had the same positive or negative result for asbestos content as the original sample. No sampling discrepancies were noted. Results of QA/QC samples can be found in Appendix B. During the site visit on November 20, 2007, EDI collected additional samples of fire doors, which were found to be positive for asbestos and included in this report.

3.0 LEAD-BASED PAINT INSPECTION

The Lead Based Paint inspection was conducted following the U.S. Department of Housing and Urban Development (HUD) *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* (1995 and 1997 Revision), using the single and/or multi-dwelling family unit sampling approach. X-Ray Fluorescence (XRF) and paint chip analysis were used for this inspection. Table 2 contains LBP inspection results. Appendix C provides lead based paint results (XRF and chip samples). Appendix D provides photographs from the survey.

3.1 Lead Based Paint Inspection Methodology

XRF Testing

XRF testing was conducted with a SciTec MAP-4 XRF spectrum analyzer using a Co-57 isotope with a 20 millicurie source. The XRF was used on interior and exterior painted surfaces, that were determined to be homogeneous within the proposed building demolition area. Homogeneous areas are materials that are similar in color, texture, and general appearance, and which appear to have been painted during the same time period. Painted surfaces which indicate a lead concentration of equal to or greater than 1.0 mg/cm^2 of surface area are considered to be LBP as defined by HUD. Calibration checks of the XRF instrument were performed prior to and at the conclusion of each work shift. The XRF instrument provides immediate positive or negative result readings of the painted surface which are then recorded on to a data log sheet.

Paint Chip Collection

Paint chip samples were collected for Quality Assurance/Quality Control (QA/QC) purposes. Sampling methods were conducted in accordance with the American National Standards Institute (ANSI) Methods ES-28 and ES-37. After the painted surfaces were identified and grouped into homogeneous areas EDI collected paint chip samples from selected homogeneous sampling areas. Samples were collected by scraping all paint layers off the substrate material using a straight edge razor blade. Samples were placed into individual sample bags with a unique sample number (such as 01) after collection. Samples were submitted to EMSL Analytical, Inc. in Chicago, Illinois, an Environmental Lead Laboratory Accreditation Program (ELLAP) accredited laboratory and were analyzed following EPA Method 6010B.

Proper chain-of-custody procedures were followed for this inspection. These procedures provide a written tracking mechanism that lists the person responsible for the sample from collection to delivery to the laboratory. Sample identification numbers and material descriptions were recorded on the chain-of-custody forms.

3.2 Lead-Based Paint Inspection Results

HUD guidelines define LBP as paint containing 0.5 percent or greater lead by weight (when calculated as lead metal in a dried solid form), 5000 milligrams per kilogram (mg/kg), or equal to or greater than 1.0 mg/cm^2 using XRF instrumentation. Painted surfaces on interior and exterior building components were observed to be in fair condition.

Based on XRF results, LBP was identified in the following building components:

Table 2
Building Components Containing Lead Based Paint

Substrate	Components Painted	Color	Location
Wood	Bay Door	Green	Room 1, North Wall
Metal	Bay Door	Green	Room 1, S/W Wall, 6, N. & E. Walls, 12, W. & S. Walls, 17, & 28
Metal	Ladder	Yellow	Room 1East side
Metal	Handrail	Yellow	Room 1 & throughout 1st Floor
Metal	Guardrail	Yellow	Room 6, 11, 13, 17, 28, 30 31 & Exclusion Zone
Concrete	Floor	Yellow	Throughout 1st Floor
Concrete	Floor	Red	Room 30 Northeast Corner
Metal	Stair Stringer	Yellow	Rooms 11, 17 & 28E
Metal	Stair Treads	Gray	Rooms 11, 17 & 28E
Metal	Stair Handrail	Yellow	Rooms 11, 17 & 28E
Metal	Stair Tread	Gray	Room 11
Metal	Machinery	Yellow	Room 11 Women's Washroom
Masonry/Cinder Block	Wall	Red	Room 12, S. Wall
Metal	Door Casing	Green	Room 13, S. Wall
Metal	Pipe	Brown	Room 15A
Metal	Pipe	White	Room 15A
Metal	I-Beam	Green	Rooms 17 N, E and W, 20, 24, 25, 28, 31 & Throughout Exclusion Zone
Metal	I-Beam	Gray	Rooms 17 N, E and W, 24, 25, 28, 31 & Throughout Exclusion Zone & Breezeway to Chemical Storage Room
Metal	Bay Door Casing	Green	Room 17, N. Wall, exclusion zone
Metal	Ramp/Dock	Rust	Room 17
Metal	Door	Green	Room 17, Exclusion Zone Large Office, East Wall
Metal	Wall	Brown	Room 17, S. Wall
Metal	Ceiling Beam	Gray	Room 17, E. Wall and ceiling, Room 21
Concrete	I- Beam	Yellow	Room 17, E. Wall
Metal	I-Beam	White	Rooms 20 N, 22, 24, 25, 26D, 30, 31 & Throughout Exclusion Zone
Metal	Ceiling Beam	Brown	Rooms 20A & 31
Metal	Ceiling Beam	White	Rooms 20A, I & K, 26D & 31
Metal	Ceiling Beam	Beige	Rooms 20K, & 26C & 28 C
Metal	I-Beam	Beige	Rooms 20M, N, S & P, 28F, N & S. Walls
Masonry/Cinder Block	Wall	Beige	Rooms 20S, E. & N. Walls
Metal	Ceiling Rafters	Gray	Rooms 21 & 31
Masonry/Cinder Block	Wall	Green	Rooms 21 & 31, Exclusion Zone Boiler Room E., S.,& W. Walls, South Dock E. & S. Walls, Office off Dock N., & E. Walls
Masonry/Cinder Block	Wall	Brown	Rooms 22/Hall, N., E., S., W. Walls
Metal	I-Beam	Brown	Exclusion Zone Large Room, Rooms 22, 23, & 30
Metal	Door	Brown	Exclusion Zone Large Room & Storage Room W. Wall, Rooms 22, 23, 28 S. Wall & 30
Metal	Pipe	Green	Room 6 North Wall

Table 2 - Building Components Containing Lead Based Paint (Continued)

Substrate	Components Painted	Color	Location
Metal	Window Casing	Green	Room 5 East Wall and Exclusion Zone East Dock South Wall
Metal	Door Casing	Brown	Exclusion Zone Large Room & Storage Room W. Wall, Rooms 22, 23, 28 South Wall & 30
Metal	Wall	Beige	Room 22 N. Wall
Masonry/Cinder Block	Wall	White	Room 24 N. Wall
Metal	Locker	Green	Rooms 25 & 26 C
Metal	Door	Beige	Room 28 N. Wall
Metal	Pipe	Yellow	Room 28E & Exclusion Zone Boiler Room W. Wall
Concrete	Wall	Green	Room 28 S. & W. Walls, Exclusion Zone Boiler Room N., E. & S. Walls
Masonry Brick	Wall	Green	Room 6 East Wall, 28F N., S. & W. Walls
Concrete	Wall	Brown	Room 28E
Metal	Window Casing	White	Room 31 N. & W. Walls
Drywall	Wall	Green	2nd Floor Room 2-3 W. Wall
Metal	Door Casing	Yellow	Breezeway to Chemical Storage Room
Concrete	Wall	Gray	Breezeway to Chemical Storage Room E., S. & W. Walls
Metal	Wall Guard	Gray	Breezeway to Chemical Storage Room East Wall
Metal	I-Beam Horizontal	Gray	Throughout Exclusion Zone
Metal	Bay Door Casing	Brown	Exclusion Zone Large Room East Wall
Metal	I-Beam Horizontal	Beige	Exclusion Zone Large Room
Metal	I-Beam Structural	Gray	Exclusion Zone & Chemical Storage Room
Metal	Wall Frame	Gray	Exclusion Zone, Chemical Storage Room & Room 31
Metal	I-Beam	Red	Exclusion Zone
Metal	I-Beam Horizontal	White	Exclusion Zone
Metal	I-Beam	Yellow	Room 1 and Exclusion Zone
Metal	Crane Frame	Yellow	Rooms 30 and 28
Metal	Crane Frame	Orange	Exclusion Zone and Room 28
Metal	Bay Door Casing	Green	Exclusion Zone Large Room
Metal	Wall	White	East Wall
Metal	Bay Door Casing	White	North Wall
Metal	Door	White	North Wall
Metal	Door	Green	North Wall
Wood	Door	Green	North and South Walls
Metal	Door Casing	Green	North and South Walls
Metal	Wall Hatch	Beige	North Wall
Metal	Window Casing	Beige	West Wall
Concrete	Wall	Beige	West Wall
Metal	Bay Door	Brown	South Wall
Metal	Stair Stringer	Green	South Wall
Metal	Window Molding	Green	South Wall
Metal	Pipe	Yellow	North Wall (West End)
Metal	Door Casing	Brown	North Wall
Metal	Window Casing	White	North Wall
Wood	Bay Door	White	North Wall
Metal	Door Casing	Beige	North Wall
Metal	Crane Frame	Yellow	Northwest Corner

3.3 Applicable Regulations and Guidelines

The HUD Guidelines cover topics such as lead-based paint inspections/risk assessments, abatement options and methods, worker protection, occupant protection, cleanup, clearance, and waste disposal. Except for those parts pertaining exclusively to housing, the guidelines can be used as resource information and methodologies for identifying and abating lead-based paint hazards in buildings.

Illinois Administrative Code 845 (Title 77, Chapter I, and Subchapter P, Part 845) defines lead abatement/mitigation as the remediation of a lead hazard so that the lead bearing substance does not pose an immediate health hazard to humans. A lead hazard is deemed to have been mitigated if the following conditions have been met:

- The surface that is the source of lead is no longer in a condition that produces a hazardous level of leaded chips, flakes, dust or any other form of leaded substances, that can be ingested or inhaled by humans; or
- The leaded surface is not accessible to children, the surface coating is covered or the access to the leaded surface is otherwise prevented.

According to the Illinois Resource Conservation and Recovery Act (35 IAC 721), and IEPA's *Information Statement on the Removal of Lead-Based Paint*, lead-based paint (LBP) containing waste at the former OMC Plant should be handled as follows:

- Workers handling LBP coated building materials must be protected from exposure following OSHA regulations.
- If demolition debris contains LBP which is still adhered to the substrate (e.g. concrete floors, walls, etc.), no special handling or testing is required, and the waste may be handled as construction debris.
- Building material recycling may present alternative handling methods that require limited or extensive mitigation or abatement prior to acceptance of the building material for recycling.
- If machinery and other building components to be recycled are prepared for recycling using methods such as sandblasting or solvent stripping, the LBP that is removed from the original substrate is considered special waste. To determine whether it is hazardous waste, this waste stream (e.g. blasting grit with paint chips, stripping agent with paint chips, etc.) must be analyzed for lead by the Toxicity Characteristic Leaching Procedure (TCLP). If the concentration of lead in the waste stream is greater than 5.0 mg/l, the waste must be handled as hazardous. The waste stream must also be tested for other relevant hazardous characteristics, including toxic parameters besides lead (e.g. chlorinated compounds if a solvent is used as a stripping agent).

USDOT and IDOT require lead-based paint waste to be properly containerized and transported by a licensed waste hauler.

3.4 Quality Assurance/Quality Control

EDI collected paint chip samples for QA/QC purposes, in accordance with the American National Standards Institute (ANSI) Methods ES-28 and ES-37. Additional QA/QC sampling was conducted on November 20, 2007 for the discrepensies identified during the first round of QA/QC. It was appearent during the site visit on November 20, 2007 that the sampling methods used to collect some of the paint chip samples may not have included all the paint layers, providing inconclusive results. Paint chip samples were re-collected following proper methods and samples submitted to EMSL. These additional samples are incorporated in this QC discussion. Results of QA/QC samples can be found in Appendix C.

EDI collected a total of 25 paint chip samples for QA/QC purposes. The QA/QC paint chips samples were collected to confirm results with the XRF data readings. 20 paint chip samples were collected from components that tested negative with the XRF. No discrepancies were found in 18 of the 20 paint chip samples collected (i.e. both XRF and paint chip results were negative for LBP). The remaining two (2) paint chip samples were found to be positive for LBP. Therefore the following components were added to the list of LBP surfaces based on the QA/QC paint chip samples results:

- Metal Window Casing (Green), located in the Exclusion Zone, South Dock, South Wall and Room 5 East Wall,
- Metal Pipe (Green), located in Room 6 North Wall

Five paint chip samples were collected from components that tested positive with the XRF. No discrepancies were found in the five paint chip samples (i.e. found to be positive for LBP by both XRF and paint chip results).

4.0 FINDINGS AND RECOMMENDATIONS

The following is a summary of the findings and recommendations based on the asbestos and lead based paint inspection performed at the OMC Plant 2.

Asbestos

Based on the results of bulk sample analysis from EDI's inspection, asbestos was identified in the following interior and exterior building components located in proposed demolition areas of the OMC Plant 2. Table 3 lists the asbestos materials, locations and estimated quantity.

Table 3 - Asbestos Containing Materials

Material	Material Locations	Estimated Quantity
9"x9" Gray w/ dots Floor Tile	Office in medical department/ west wall	240 S.F.
9"x9" Gray w/White streaks Floor Tile	Medical department throughout east side/ west side, multi layer east side Area 23	3,900 S.F.
9"x9" Gray w/White streaks Floor Tile Mastic	Medical department throughout east side/west side, multi layer east side Area 23	3,900 S.F.
12"x12" Green w/ White Floor Tile	Medical department east side/multilayer	2,500 S.F.
12"x12" Tan w/ Spots Floor Tile	Office in medical department west wall, office by crane/ office 11, 11f, 11g, 11h	1,000 S.F.
12"x12" Beige Floor Tile Mastic	Office best wall/ medical department, ladies toilet area 24, men's toilet area 25, toilets in Exclusion zone	936 S.F.
12"x12" Tan Floor Tile	Offices in exclusion zone, guard house, floor outside locker room 2, Area 4 office.	1,110 S.F.
12"x12" Tan w/ Brown Floor Tile	Office by S.E. Docks, Exclusion Zone office area, Department 202 polishments, Office area 17A, Receiving office.	1,110 S.F.
Black Lab Tops	Chemical Labs	276 S.F.
Corrugated Interior Transite Panels	Outer wall of Bridge Mechanical room over stair case, over supply crib. Area Steam cylinder room.	4,200 S.F.
Flat Interior Transite Panels	Outer wall of Bridge Mechanical room over stair case, over supply crib. Area Steam cylinder room	2,000 S.F.
Hard Fittings on 2" Fiberglass TSI	Mechanical rooms, pipe chases throughout boiler rooms. Above ceilings throughout the plant work area.	210 EA
4" Cardboard TSI	Throughout the Plant area pipe chases throughout Mechanical room pipe chases, medical dept, off east chemical lab	3,100 L.F.

Table 3 - Asbestos Containing Materials (Continued)

Material	Material Locations	Estimated Quantity
Hard Fittings on 4" Fiberglass TSI	Above ceilings throughout building. locker rooms, pipe chases, boiler rooms	210 EA
4" Aircell TSI	Bridge to Corp offices, mechanical rooms throughout Plant area and assoc piping.	2,200 L.F.
Hard Fittings on 4" Aircell TSI	Bridge to Corp offices, mechanical rooms throughout Plant area and assoc piping	186 EA
Hard Fittings on 4" Fiberglass TSI	Ceiling above plant work area, pipe chases, mechanical and boiler rooms.	160 EA
6" Cardboard TSI	Roof drains, Plant area, throughout Mechanical rooms over Med dept, throughout ceilings plant work areas.	3,500 L.F.
Hard Fittings on 6" Cardboard TSI	Roof drains, Plant area, throughout Mechanical rooms over Med dept, throughout ceilings plant work areas.	240 EA
6" Aircell TSI	Mechanical rooms, pipe chases, locker rooms ceilings throughout plant work area	2,900 L.F.
Hard Fittings on 6" Aircell TSI	Mechanical rooms, pipe chases, locker rooms ceilings throughout plant work area	165 EA
10" Mag Block TSI	Ceiling perimeter pipe area 11. Area 30 Steam Cylinder room.	3,200 L.F.
Hard Fittings on 10" Mag Block TSI	Ceiling perimeter pipe area 11. Area 30 Steam Cylinder room.	92 EA
Hard Fittings on 10" Fiberglass TSI	Area 14 Tank Clarifier room, Area 15 Steam Cylinder room, throughout plant work areas	45 EA
Hard Fittings on 8" Aircell TSI	Ceiling above Corp office area. Mechanical rooms, ceilings of Plant work areas	25 EA
Canvas Wrap on Ceiling Level AHU's	Throughout Plant work area.	5,050 S.F.
Brown Duct TSI	Medical Dept Mechanical room Chem. Lab Mechanical room Supply Crib Mechanical room	3,600 S.F.
Mechanical Room Duct TSI	Mechanical rooms above; staircase, supply crib, Medical dept, and throughout Plant work area	1,650 S.F.
Boiler Door Gaskets	Boiler room by Fire Zone J Sign	138 L.F.
AHU Access Door Gaskets	Mechanical Rooms	72 L.F.
Furnace Door Gaskets	Area 11 Near offices Col. 192 Washers 1 & 2	126 L.F.
Storage Tank A TSI	Ceiling area by Exclusion Zone	250 S.F.
Storage Tank C TSI	Tank in Locker room 2	250 S.F.
Corrugated Exterior Transite Panels	Throughout all elevators	65,000 S.F.
Flat Exterior Transite Panels	Throughout all elevators	65,000 S.F
Caulk on Aluminum Siding	West Elevation	1,500 L.F.
Caulk on Large Concrete Blocks	Seams of Concrete Foundation Blocks along Exterior Perimeter	1,150 L.F.

Table 3 - Asbestos Containing Materials (Continued)

Material	Material Locations	Estimated Quantity
Expansion Joints on Large Concrete Blocks	Seams of Concrete Foundation Blocks along Exterior Perimeter	1,150 L.F.
Caulk on Metal Trough	East side of Building on Exterior near Overhead Garage Doors	25 L.F.
Door Caulk	Exterior doors of all elevations	300 L.F
Overhead Garage Door Caulk	Exterior Door of All Elevations	650 L.F.
Ventilation Grill Caulk	East side of Building on Exterior	50 L.F.
Metal Building Roof Drain Caulk	Former Hazardous Waste Storage Building Along Roof Level	25 L.F.
Glass Door Frame Caulk	South Elevation	40 L.F.
Window Caulk on Large Multi-Pane Windows	All Elevations	5,255 LF
Window Glazing on Small Windows	All Elevations	56,600 LF
Gasket on Exterior Upright Tank	East Side of Building Exterior	1 EA
Green Debris Near NW Ramp	North Side near Bottom of Ramp to Building	25 S.F.
2” Cardboard TSI	Area 1 Mobile Office, Risers by access roof assoc with AHU ceiling pipe.	2,100 L.F.
Caulk on Roof Electrical Units	Main Roof Elevation – East Side	75 L.F.
Caulk on Roof Pipe Penetrations	Main Roof Elevation Throughout	20 L.F.
Caulk on Roof Square Air Intake	Main Roof Elevation Throughout	20 L.F.
45 Degree Roof Fan Unit Caulk	Main Roof Elevation	25 L.F.
Tar Caulking on Roof Units	Main Roof Elevation	25 L.F.
Window Glazing on Skylights	Main Roof Elevation Throughout	35,000 L.F.
Gaskets on AHU Roof Doors	Main Roof Elevation	50 L.F.
Flashing on Built-up Roof Material	Main Roof Elevation	225 L.F.
9”x9” Tan w/ White Floor Tile	Chemical Lab	1,510 S.F.
9”x9” Tan w/ White Floor Tile Mastic	Chemical Lab	1,510 S.F.
9”x 9” Tan Floor Tile	Lunchroom	420 S.F.
9”x 9” Tan Floor Tile Mastic	Lunchroom	420 S.F.
Transite Material from Electrical Panel Boxes	Located throughout the interior in the old electrical troughs (most of these are now scattered on the floor)	150 EA (Estimate Only!)

Table 3 - Asbestos Containing Materials (Continued)

Material	Material Locations	Estimated Quantity
9"x 9" Gray Floor Tile	Exclusion Zone Office	420 S.F.
9"x 9" Gray Floor Tile Mastic	Exclusion Zone Office	420 S.F.
Heating Unit Insulation	Throughout Mechanical rooms	1200 S.F.
Hard Fittings on 2" Cardboard TSI	Area 1 Mobile Office area by roof access, pipe chases, ceiling AHU	165 EA
12"x 12" Multi-Color Floor Tile Mastic	Front Dr.'s office Medical Dept under carpet	500 S.F.
Insulated Fire Doors	Throughout Facility	100 EA.

EDI recommends that the materials verified to be asbestos-containing materials be abated following the development of an asbestos abatement design developed by a licensed IDPH Asbestos Project Designer. Abatement protocol should conform to the work practices outlined by the IDPH, OSHA, NESHAP and all other applicable federal and local regulations. A cost estimate for this ACM Abatement can be found in Appendix E.

Lead

Based on XRF readings and paint chip analysis, lead-based paint was detected on the following components of the OMC Plant 2. Table 4 list the components testing positive for lead-based paint, substrates, color, locations and estimated quantity

Table 4 - Components Testing Positive for Lead Based Paint

Substrate	Components Painted	Color	Location	Quantity
Wood	Bay Door	Green	Room 1, North Wall	242 S.F.
Metal	Bay Door	Green	Room 1: S/W Wall Room 6: N. & E. Walls Room 12: W. & S. Walls, Room 17 & 28	96 S.F. 500 S.F. 528 S.F. 429 S.F.
Metal	Ladder	Yellow	Room 1 East side	15 L.F.
Metal	Handrail	Yellow	Room 1 & throughout 1st Floor	100 L.F.
Metal	Guardrail	Yellow	Room 6, 11, 13, 17, 28, 30, Exclusion Zone	260 S.F.
Concrete	Floor	Yellow	Throughout 1st Floor	8200 S.F.
Concrete	Floor	Red	Room 30 Northeast Corner	40 S.F.
Metal	Stair Treads	Gray	Rooms 11 Room 17 Room 28E	35 L.F. 35 L.F. 35 L.F.
Metal	Stair Handrail	Yellow	Rooms 11 Room 17 Rom 28E	35 L.F. 35 L.F. 35 L.F.
Metal	Stair Tread	Gray	Room 11	2 L.F.
Metal	Pipe	Green	Room 6 North Wall	75 L.F.

Table 4 - Components Testing Positive for Lead Based Paint (Continued)

Substrate	Components Painted	Color	Location	Quantity
Metal	Window Casing	Green	Exclusion Zone South Dock South Wall and Room 5 East Wall	100 L.F.
Metal	Machinery	Yellow	Room 11 Women's Washroom	100 S.F.
Masonry/Cinder Block	Wall	Red	Room 12 S. Wall	800 S.F.
Metal	Door Casing	Green	Room 13 S. Wall	36 L.F.
Metal	Pipe	Brown	Room 15A	8 L.F.
Metal	Pipe	White	Room 15A	7 L.F.
Metal	I-Beam	Green	Rooms 17 N, E and W Room 20 Room 24 Room 25 Room 28 Room 31 & Throughout Exclusion Zone	520 S.F.
Metal	I-Beam	Gray	Rooms 17 N, E and W, 24, 25, 28, 31 & Throughout Exclusion Zone & Breezeway to Chemical Storage Room	825 S.F.
Metal	Bay Door Casing	Green	Room 17 N. Wall Exclusion Zone	144 LF.
Metal	Ramp/Dock	Rust	Room 17	60 S.F.
Metal	Door	Green	Room 17 E. Wall Large Office Exclusion Zone	32 S.F.
Metal	Wall	Brown	Room 17, S. Wall	120 S.F.
Metal	Ceiling Beam	Gray	Room 17, E. Wall and ceiling, Room 21	1,000 S.F.
Concrete	I- Beam	Yellow	Room 17, E. Wall	6 S.F.
Metal	I-Beam	White	Rooms 20 N, 22, 24, 25, 26D, 30, 31 & Throughout Exclusion Zone	350 S.F.
Metal	Ceiling Beam	Brown	Rooms 20A & 31	84 S.F.
Metal	Ceiling Beam	White	Rooms 20A, I & K, 26D & 31	500 S.F.
Metal	Ceiling Beam	Beige	Rooms 20K, & 26C & 28 C	40 S.F.
Metal	I-Beam	Beige	Rooms 20M, N, S & P, 28F, N & S. Walls	300 S.F.
Masonry/Cinder Block	Wall	Beige	Rooms 20S, E. & N. Walls	1,300 S.F.
Metal	Ceiling Rafters	Gray	Rooms 21 & 31	220 S.F.
Masonry/Cinder Block	Wall	Green	Rooms 21 & 31, Boiler Room East South & West Walls Exclusion Zone South Dock E. & S. Walls, Office off Dock N., & E. Walls	950 S.F.
Masonry/Cinder Block	Wall	Brown	Rooms 22/Hall, North, East, South, West Walls	2,000 S.F.
Metal	I-Beam	Brown	Exclusion Zone Large Room, Rooms 22, 23, & 30	400 S.F.
Metal	Door	Brown	Exclusion Zone Large Room & Storage Room W. Wall, Rooms 22, 23, 28E S. Wall	200 S.F.
Metal	Door Casing	Brown	Rooms 22, 23, 28 West Wall Exclusion Zone (Storage Room)	102 L.F.
Metal	Wall	Beige	Room 22 North Wall	300 S.F.

Table 4 - Components Testing Positive for Lead Based Paint (Continued)

Substrate	Components Painted	Color	Location	Quantity
Masonry/Cinder Block	Wall	White	Room 24 N. Wall	225 S.F.
Metal	Locker	Green	Rooms 25 & 26 C	372 S.F.
Metal	Door	Beige	Room 28 N. Wall	32 S.F.
Metal	Pipe	Yellow	Room 28E & Exclusion Zone Boiler Room W. Wall	300 LF.
Concrete	Wall	Green	Room 28 S. & W. Walls, Exclusion Zone Boiler Room N., E. & S. Walls	900 S.F.
Masonry Brick	Wall	Green	Room 28F N., S. & W. Walls and Room 6 East Wall	100 S.F.
Concrete	Wall	Brown	Room 28E	50 S.F.
Metal	Window Casing	White	Room 31 N. & W. Walls	225 L.F.
Drywall	Wall	Green	2nd Floor Room 2-3 W. Wall	96 S.F.
Metal	Door Casing	Yellow	Breezeway to Chemical Storage Room	41 L.F.
Concrete	Wall	Gray	Chemical Storage Room S. Walls	1,000 S.F.
Metal	Wall Guard	Gray	Chemical Storage Room East Wall	10 LF.
Metal	I-Beam Horizontal	Gray	Throughout Exclusion Zone	2,500 S.F.
Metal	Bay Door Casing	Brown	Exclusion Zone Large Room East Wall	38 L.F.
Metal	I-Beam Horizontal	Beige	Exclusion Zone Large Room	1,000 S.F.
Metal	I-Beam Structural	Gray	Exclusion Zone	2,500 S.F.
Metal	Wall Frame	Gray	Exclusion Zone, Chemical Storage Room & Room 31	1,800 S.F.
Metal	I-Beam	Red	Exclusion Zone	15 S.F.
Metal	I-Beam Horizontal	White	Exclusion Zone	250 S.F.
Metal	I-Beam	Yellow	Exclusion Zone and Room 1	84 S.F.
Metal	Crane Frame	Yellow	Rooms 30 and 28	400 S.F.
Metal	Crane Frame	Orange	Exclusion Zone and Room 28	400 S.F.
Metal	Bay Door Casing	Green	Exclusion Zone Large Room	38 L.F.
Metal	Wall	White	East Wall Guard House	300 S.F.
Metal	Bay Door Casing	White	Exterior-North Wall	38 L.F
Metal	Door	White	Exterior-North Wall	32 S.F.
Metal	Door	Green	Exterior-North Wall	100 S.F.
Wood	Door	Green	Exterior-North and South Walls	160 S.F.
Metal	Door Casing	Green	Exterior-North and South Walls	38 L.F.
Metal	Wall Hatch	Beige	Exterior-North Wall	3 S.F.
Metal	Window Casing	Beige	Exterior-West Wall	350 L.F.
Concrete	Wall	Beige	Exterior-West Wall	800 S.F.
Metal	Bay Door	Brown	Exterior-South Wall	168 S.F.
Metal	Stair Stringer	Green	Exterior-South Wall	30 L.F.
Metal	Window Molding	Green	Exterior-South Wall	380 L.F.
Metal	Pipe	Yellow	Exterior-North Wall (West End)	150 LF.
Metal	Door Casing	Brown	Exterior-North Wall	17 L.F.
Metal	Window Casing	White	Exterior-North Wall	225 L.F.
Wood	Bay Door	White	Exterior-North Wall	40 S.F.
Metal	Door Casing	Beige	Exterior-North Wall	17 L.F.
Metal	Crane Frame	Yellow	Exterior-Northwest Corner	100 S.F.

Workers who handle LBP coated building components that are scheduled for recycling must be protected from exposure following OSHA regulations. Construction/ demolition debris may not require LBP abatement. LBP abatement or mitigation for building material recycling may vary depending on process and/or vendor.

EDI recommends that a lead-based paint abatement project design be developed by a licensed IDPH lead risk assessor for any LBP that is to be removed during the demolition project. Abatement protocol shall conform to the work practices outlined by IDPH, OSHA, and other applicable federal and local regulations.

The following are some examples of different recycling options and the possible levels of abatement/mitigation that may be required:

- If a metal building material is to be recycled by smelting methods, no or very little abatement may be required.
- If a wood material is to be reused, possible methods of recycling may include stripping the paint using chemicals, therefore requiring no or very little abatement.
- If a concrete material is to be used as a fill material, then stripping of all the LBP may be required in order for the debris to be considered “clean”.

A cost estimate for abatement of ACM and LBP materials is included in Appendix E, however, abatement of LBP may not be required.

5.0 LIMITATIONS

This report is based solely on the scope of work provided and the assumptions based on this inspection. Any new information that becomes available concerning the OMC Plant 2 property should be provided to EDI so that our evaluations, conclusions, and recommendations may be revised and modified accordingly. All materials tested are assumed homogeneous throughout the proposed demolition areas. Any materials that are encountered after this inspection, and appear to be homogeneous to the suspect materials identified in this inspection, shall be considered to be to asbestos-containing material.

Areas below the slab level were not within the scope of work during the time of the inspection and should be inspected by licensed Asbestos and Lead Building Inspectors for potential ACM and LBP prior to disturbing any materials within these areas. These areas include below grade pipe chases and pits.

6.0 ABBREVIATIONS

ACM: Asbestos Containing Materials

ANSI: American National Standards Institute

DOT: U.S. Department of Transportation

EPA: Environmental Protection Agency

ELLAP: Environmental Lead Laboratory Accreditation Program

HUD: U.S. Housing and Urban Development

IDOT: Illinois Department of Transportation

LBP: Lead-Based Paint

NESHAP: National Emissions Standard for Hazardous Air Pollution

NVLAP: National Voluntary Laboratory Accreditation Program

OSHA: Occupational Safety and Health Administration

PLM: Polarized Light Microscopy

RACM: Regulated Asbestos Containing Material

TEM: Transmission Electron Microscopy

TSI: Thermal System Insulation

XRF: X-Ray Fluorescence

7.0 REFERENCES

Code of Federal Regulations (CFR), 40 CFR 763, (Asbestos Hazard Emergency Response Act)

Code of Federal Regulations (CFR), 29 CFR 1926.1101 (OSHA, Asbestos)

Code of Federal Regulations (CFR), 29 CFR 1926.62 (OSHA, Lead-Based Paint)

Code of Federal Regulations (CFR), 40 CFR 61 (NESHAP, Asbestos)

State of Illinois Administrative Code, 35 Ill. Adm. Code, Section 721.102, Subpart C

State of Illinois Administrative Code, 35 Ill. Adm. Code, Section 733

State of Illinois Administrative Code, 35 Ill. Adm. Code, Sections 808, 809, and 810 (Special Waste)

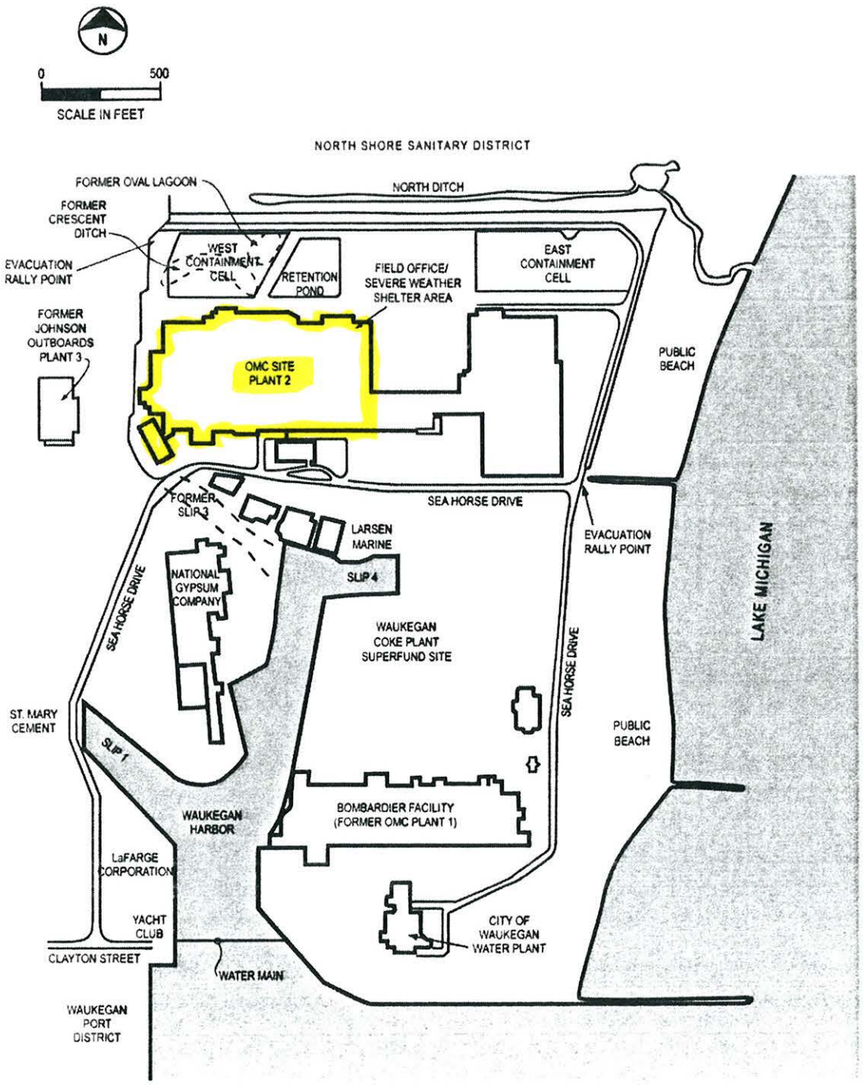
State of Illinois Administrative Code, 105 Ill. Adm. Code, Section 105

State of Illinois Administrative Code, 225 Ill. Adm. Code, Section 207

State of Illinois Administrative Code, 77 Ill. Adm. Code, Section 855

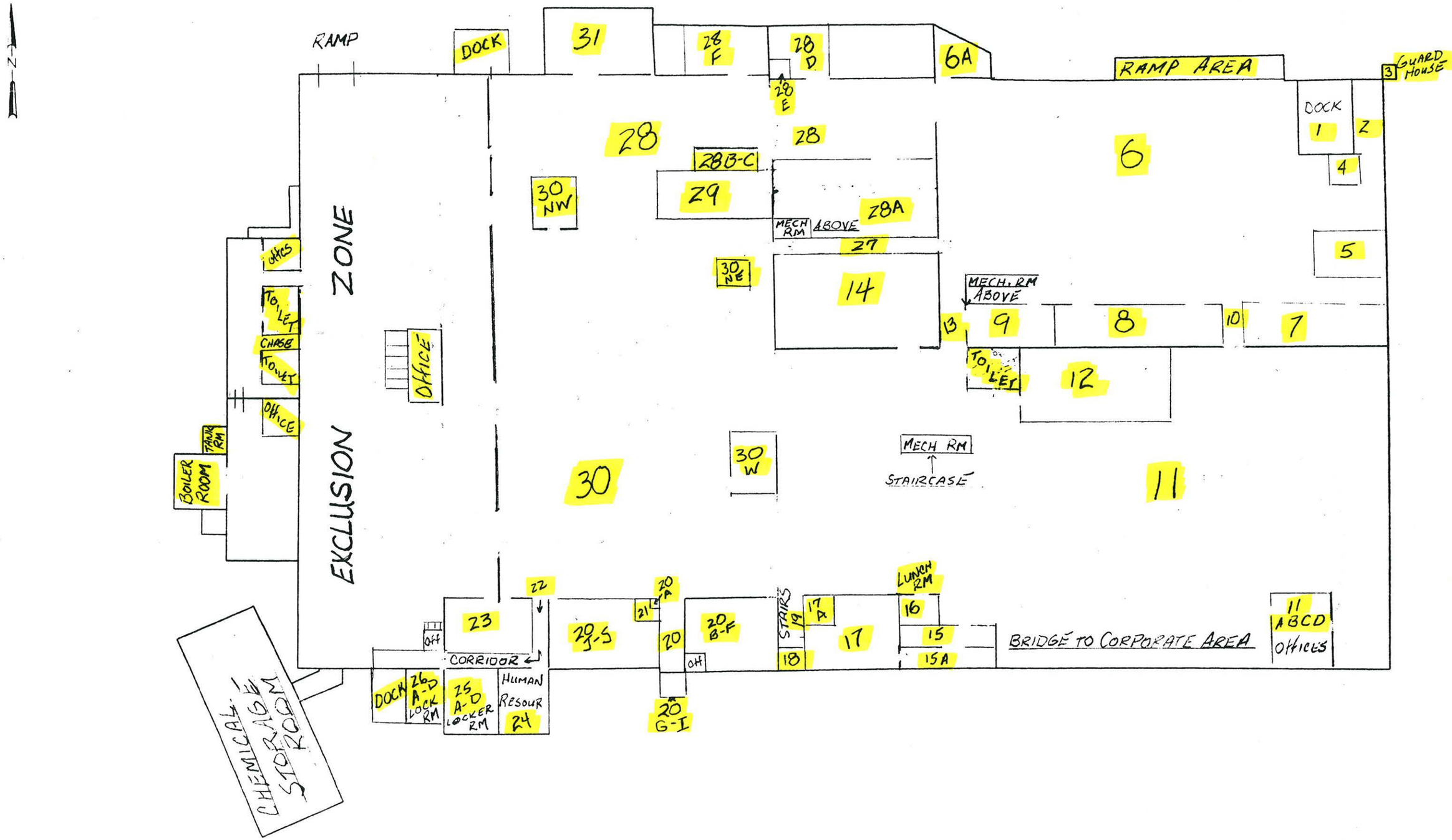
U.S. Department of Housing and Urban Development, 1995. Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, Washington D.C.

SITE PLANS
Figures 1, 2 and 3



↑
N

Project No: 1515.007	**Figure 1: Site Location Map OMC Plant 2** Source: CH2M Hill HASP prepared Nov 10, 2006	**Project:**	**OMC Plant 2 Waukegan, Illinois**
Date: **10/25/07**			
Environmental Design International inc. *200 S. Michigan Avenue, Suite 700* *Chicago, IL 60604 Phone (312) 356-5400*		**Prepared By PF**	**Verified By DM**



DRAWN BY: Dm/LWS	APPROVED BY: D.Mc.	TITLE: First Floor Plan
DATE: 10/31/07	PROJ. NO.: 1515.007.01	With Assigned Room Numbers
DWG. NO.:	DWG.	

EDI ENVIRONMENTAL DESIGN INTERNATIONAL inc.
200 S. MICHIGAN AVENUE, SUITE 700
CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. 2

N

STAIRWELL

SLOP SINK

CONF. RM.

2-17

2-18

2-2

STAIRWELL

2-1

2-3

2-13

2-19

2-20

2-14

2-4

2-5

2-12

2-11

2-10

2-9

2-8

2-7

2-6

BRIDGE

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: 2nd Floor Corporate Office Area	
DATE: 10\22\2007	PROJ. NO. 1515.007.01		
DWG. NO.:	DWG.		

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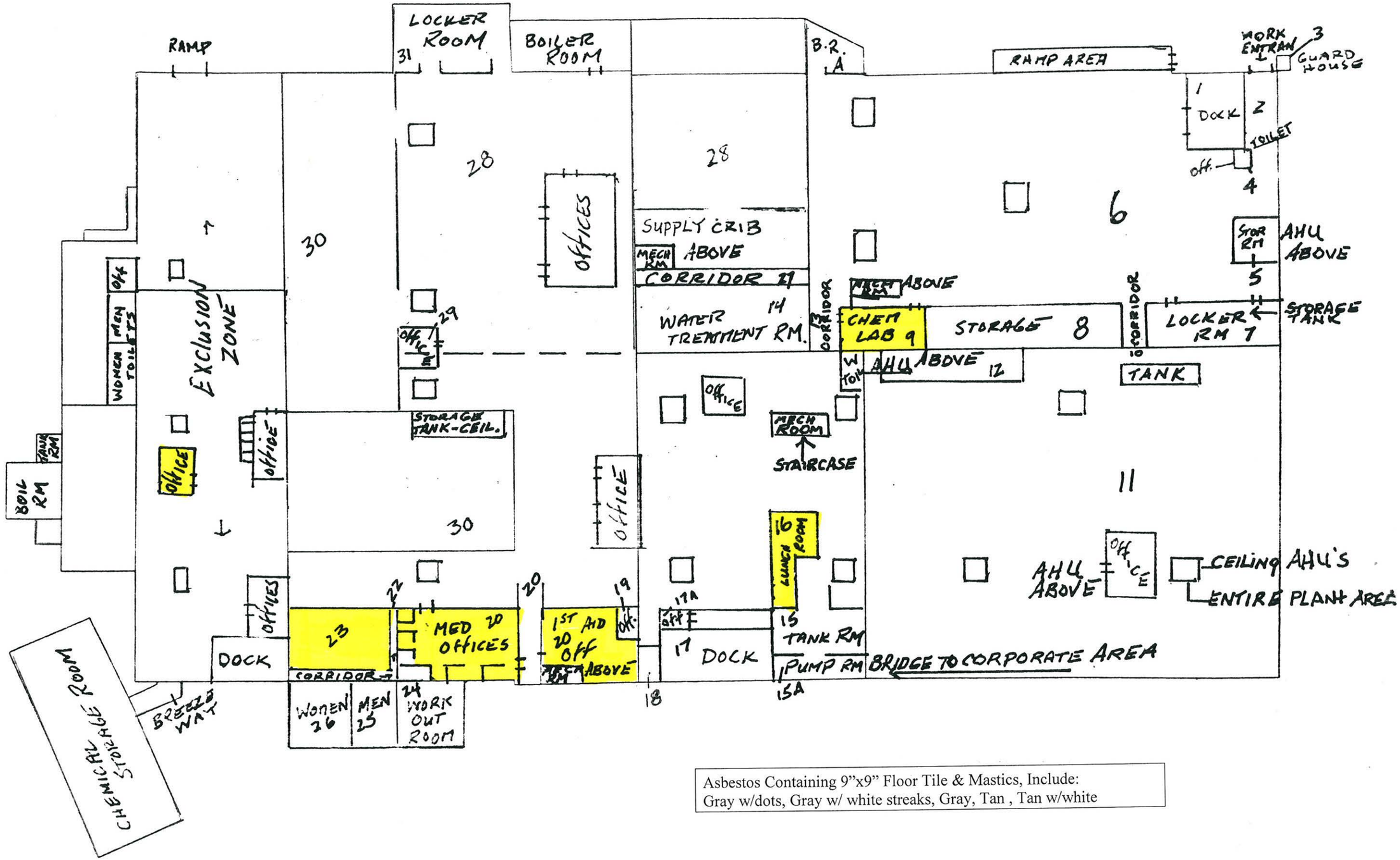
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. 3

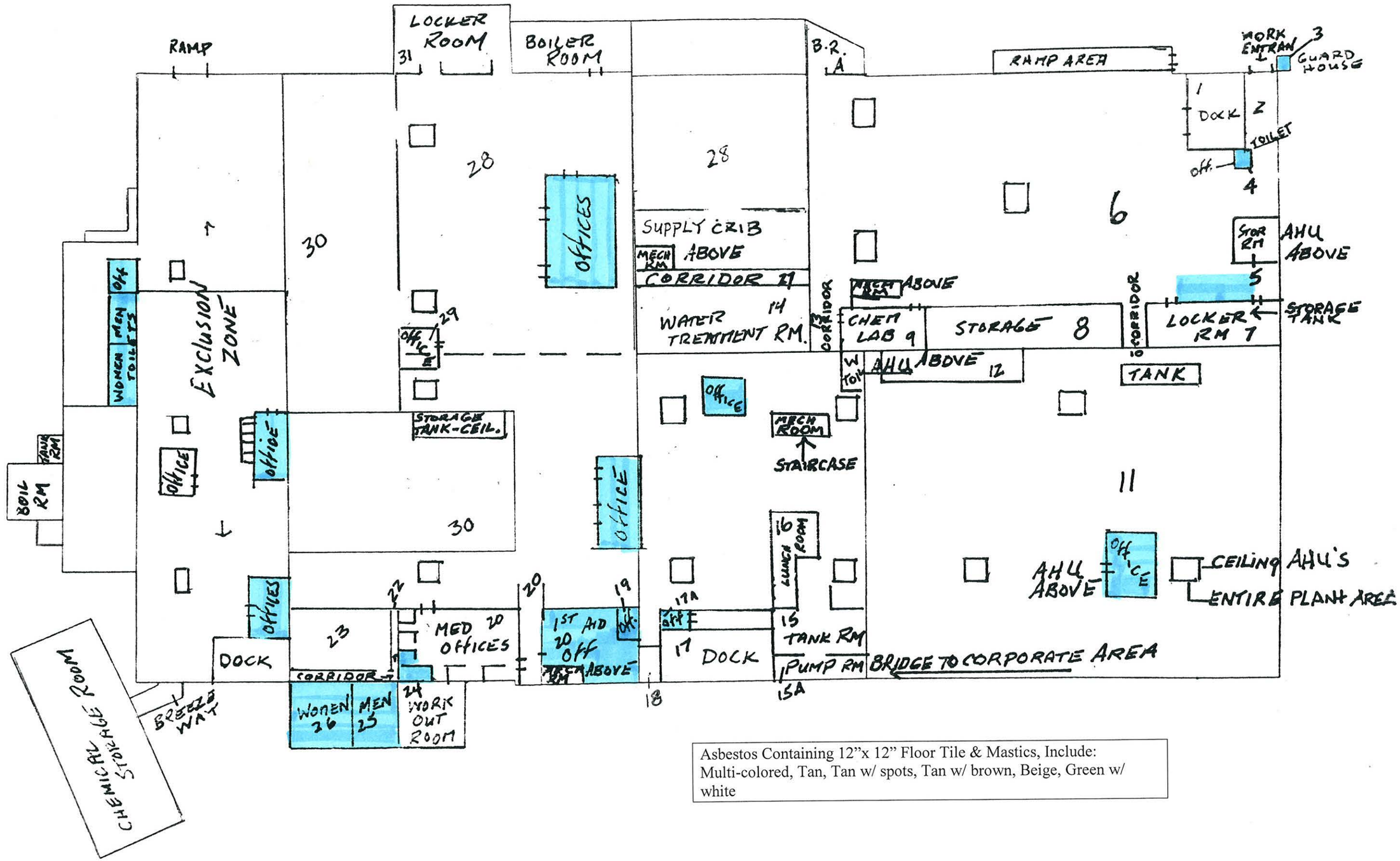
Appendix A:
Asbestos and Lead-Based Paint Location Drawings

Asbestos Location Drawings



Asbestos Containing 9"x9" Floor Tile & Mastics, Include:
Gray w/dots, Gray w/ white streaks, Gray, Tan , Tan w/white

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: 9"x9" Floor Tile and Mastic	ENVIRONMENTAL DESIGN INTERNATIONAL inc. 200 S. MICHIGAN AVENUE, SUITE 700 CHICAGO, IL 60604 PHONE: (312)-356-5400	CLIENT: CH2M HILL OMC PLANT 2 100 E. SEA HORSE DRIVE WAUKEGAN, ILLINOIS 60085	FIG. ASB-1
DATE: 10/31/07	PROJ. NO.: 1515.007.01				
DWG. NO.:	DWG.				



Asbestos Containing 12"x 12" Floor Tile & Mastics, Include: Multi-colored, Tan, Tan w/ spots, Tan w/ brown, Beige, Green w/ white

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: 12"x12" Floor Tile and Mastic	EDI ENVIRONMENTAL DESIGN INTERNATIONAL inc. 200 S. MICHIGAN AVENUE, SUITE 700 CHICAGO, IL 60604 PHONE: (312)-356-5400	CLIENT: CH2M HILL OMC PLANT 2 100 E. SEA HORSE DRIVE WAUKEGAN, ILLINOIS 60085	FIG. ASB-2
DATE: 10/31/07	PROJ. NO.: 1515.007.01				
DWG. NO.:	DWG.				

N

RAMP

LOCKER ROOM

BOILER ROOM

B.R. A

RAMP AREA

WORK ENTRANCE 3

GUARD HOUSE

1

DOCK

2

TOILET

off.

4

6

STOR RM

AHU ABOVE

5

STORAGE TANK

LOCKER RM 7

TANK

CORRIDOR

CHEM LAB 9

STORAGE 8

AHU ABOVE 12

MECH RM ABOVE

W TOILET

11

MECH ROOM

STAIRCASE

OFFICE

SUPPLY CRIB

MECH RM ABOVE

CORRIDOR 21

WATER TREATMENT RM. 14

28

28

30

30

OFFICES

OFFICE 29

STORAGE TANK-CEIL.

OFFICE

OFFICE

OFFICE

OFFICE

OFFICES

DOCK

23

22

MED OFFICES 20

CORRIDOR

WOMEN 26

MEN 25

24 WORK OUT ROOM

1ST AID 20 OFF

ABOVE

19

17A

17 DOCK

16 LUNCH ROOM

15 TANK RM

PUMP RM

BRIDGE TO CORPORATE AREA

15A

18

AHU ABOVE

OFFICE

CEILING AHU'S ENTIRE PLANT AREA

BREEZE WAY

CHEMICAL STORAGE ROOM

Thermal Systems Pipe Insulation & Hard Fittings, Include:
2",4",6" Cardboard insulation & fittings
4", 6", 8" Aircell insulation & fittings
10" Mag insulation and fittings
All Hard fittings on all Fiberglass insulation

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Thermal System Pipe Insulation and Hard Fittings
DATE: 10/31/07	PROJ. NO.: 1515.007.01	
DWG. NO.:	DWG.	

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CLIENT: CH2M HILL
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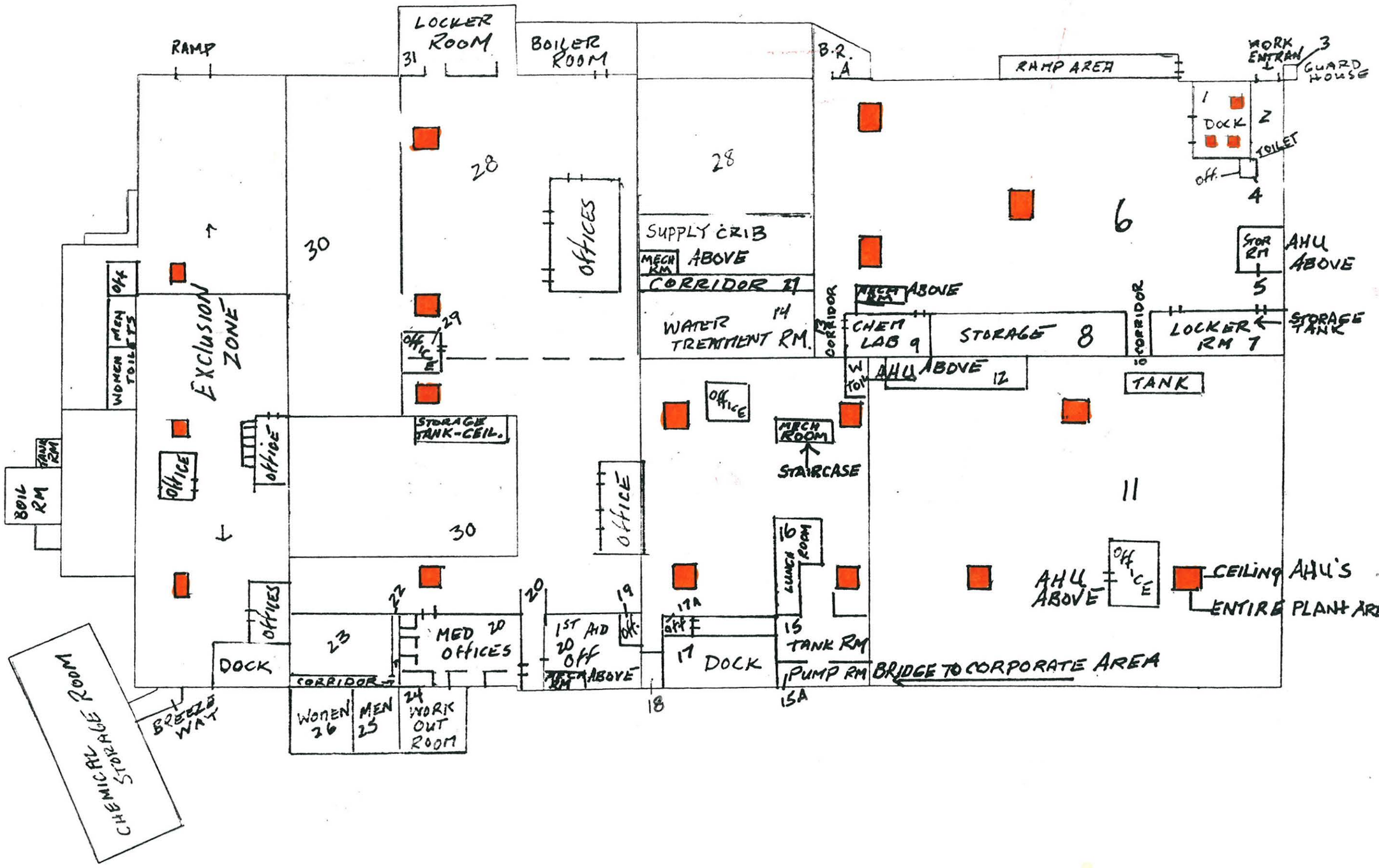
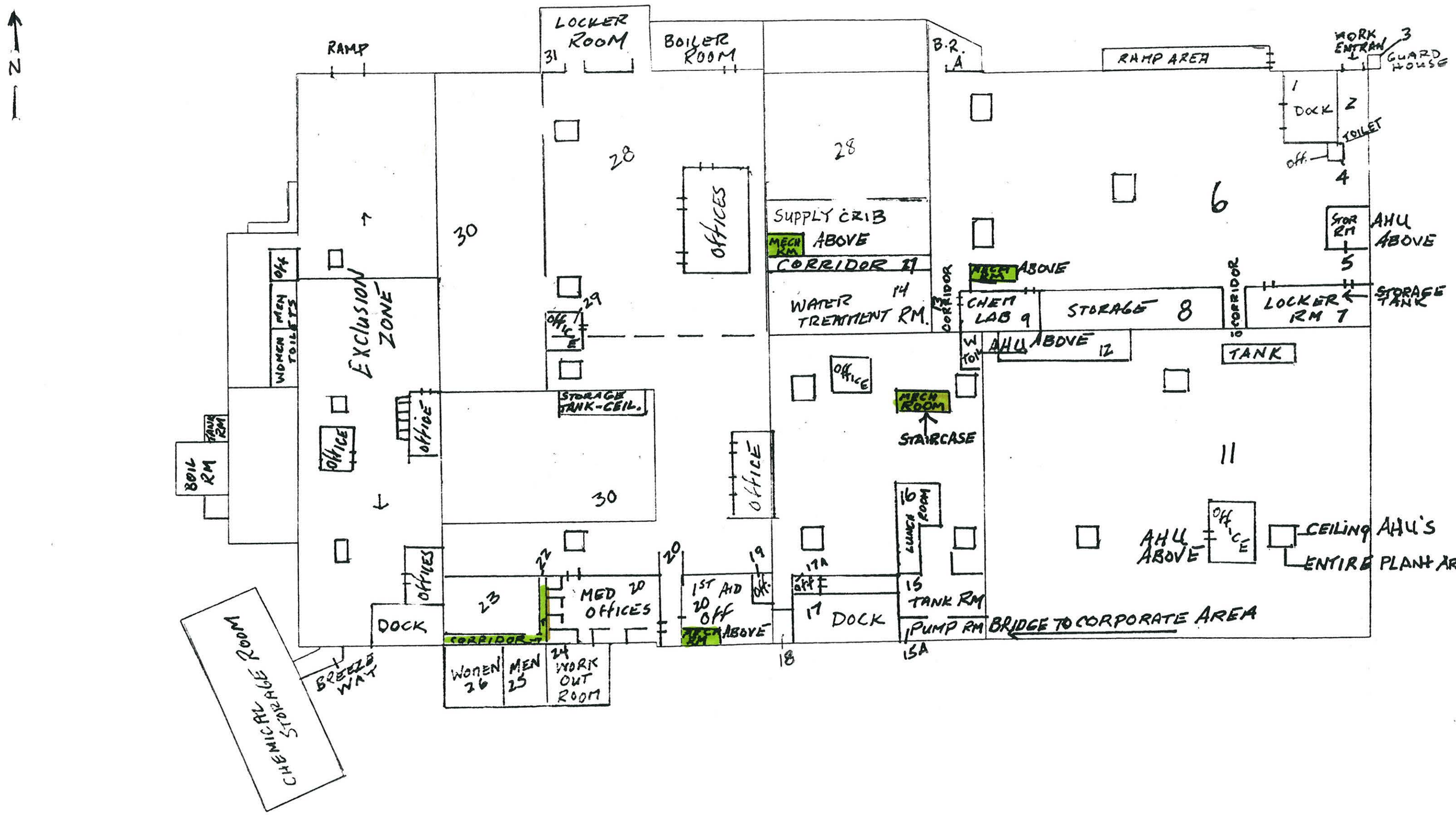
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-3



DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Canvas Wrap on Ceiling Level Air Handling Units	EDI ENVIRONMENTAL DESIGN INTERNATIONAL inc. 200 S. MICHIGAN AVENUE, SUITE 700 CHICAGO, IL 60604 PHONE: (312)-356-5400	CLIENT: CH2M HILL OMC PLANT 2 100 E. SEA HORSE DRIVE WAUKEGAN, ILLINOIS 60085	FIG. ASB-4
DATE: 10/31/07	PROJ. NO.: 1515.007.01				
DWG. NO.:	DWG.				



DRAWN BY: DM/CWS	APPROVED BY: D.Mc.	TITLE: Brown Duct Thermal System Insulation	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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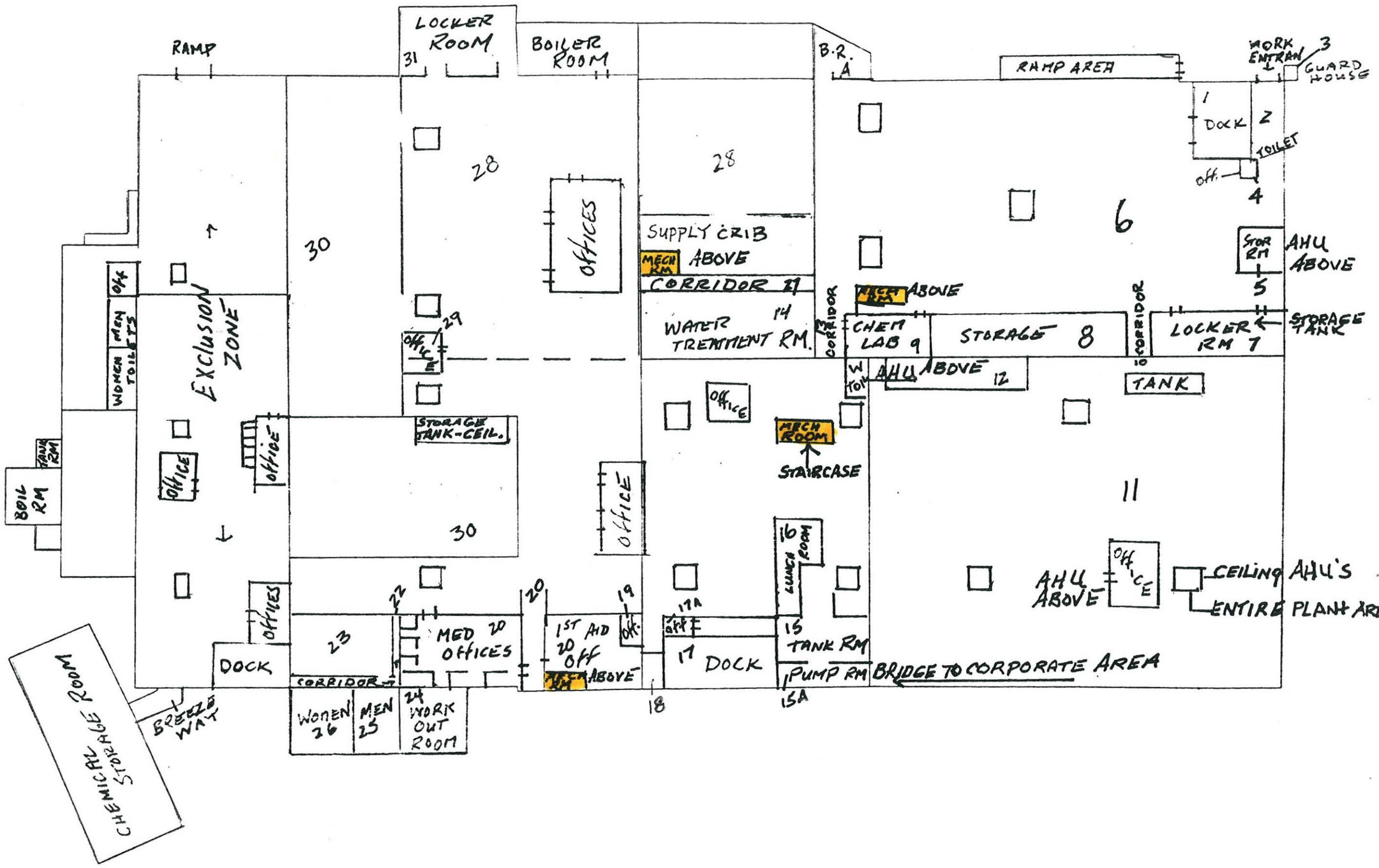
CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-5



DRAWN BY: Dm/LWS	APPROVED BY: D.Mc.	TITLE: Mechanical Room Duct Thermal System Insulation	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-6

N

RAMP

LOCKER ROOM

31

BOILER ROOM

B.R. A

RAMP AREA

WORK ENTRAN 3

GUARD HOUSE

1 DOCK 2

TOILET

OFF.

4

6

28

28

30

OFFICES

SUPPLY CRIB

MECH RM ABOVE

CORRIDOR 14

WATER TREATMENT RM.

STOR RM

AHU ABOVE

5

MECH RM ABOVE

CHEM LAB 9

STORAGE 8

LOCKER RM 7

STORAGE TANK

CORRIDOR 13

CORRIDOR 10

W TOILET

AHU ABOVE 12

TANK

OFFICE

MECH ROOM

STAIRCASE

11

EXCLUSION ZONE

O/K

MEN TOILETS

WOMEN TOILETS

BOIL RM

TANK RM

OFFICE

OFFICE

OFFICE

29

STORAGE TANK-CEIL.

30

OFFICE

LUNCH ROOM 16

OFFICE

AHU ABOVE

CEILING AHU'S

ENTIRE PLANT AREA

22

20

19

17A

OFF

15 TANK RM

DOCK

23

MED OFFICES 20

1ST AID 20

OFF

ABOVE

17 DOCK

PUMP RM

BRIDGE TO CORPORATE AREA

DOCK

CORRIDOR

18

15A

WOMEN 26

MEN 25

24 WORK OUT ROOM

BREEZE WAY

CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Boiler Door Gaskets	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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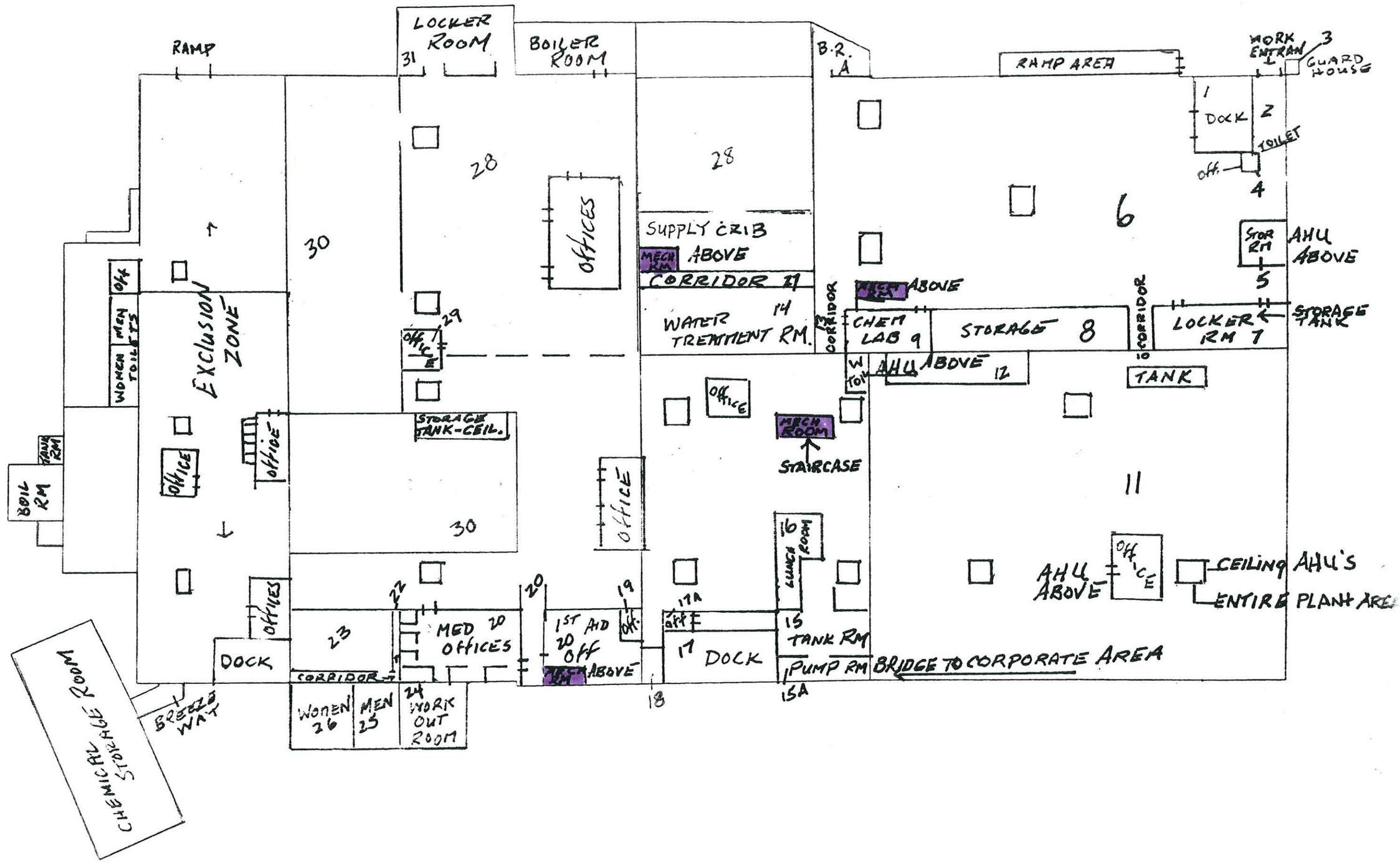
CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-7



DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Air Handling Unit Access Door Gaskets	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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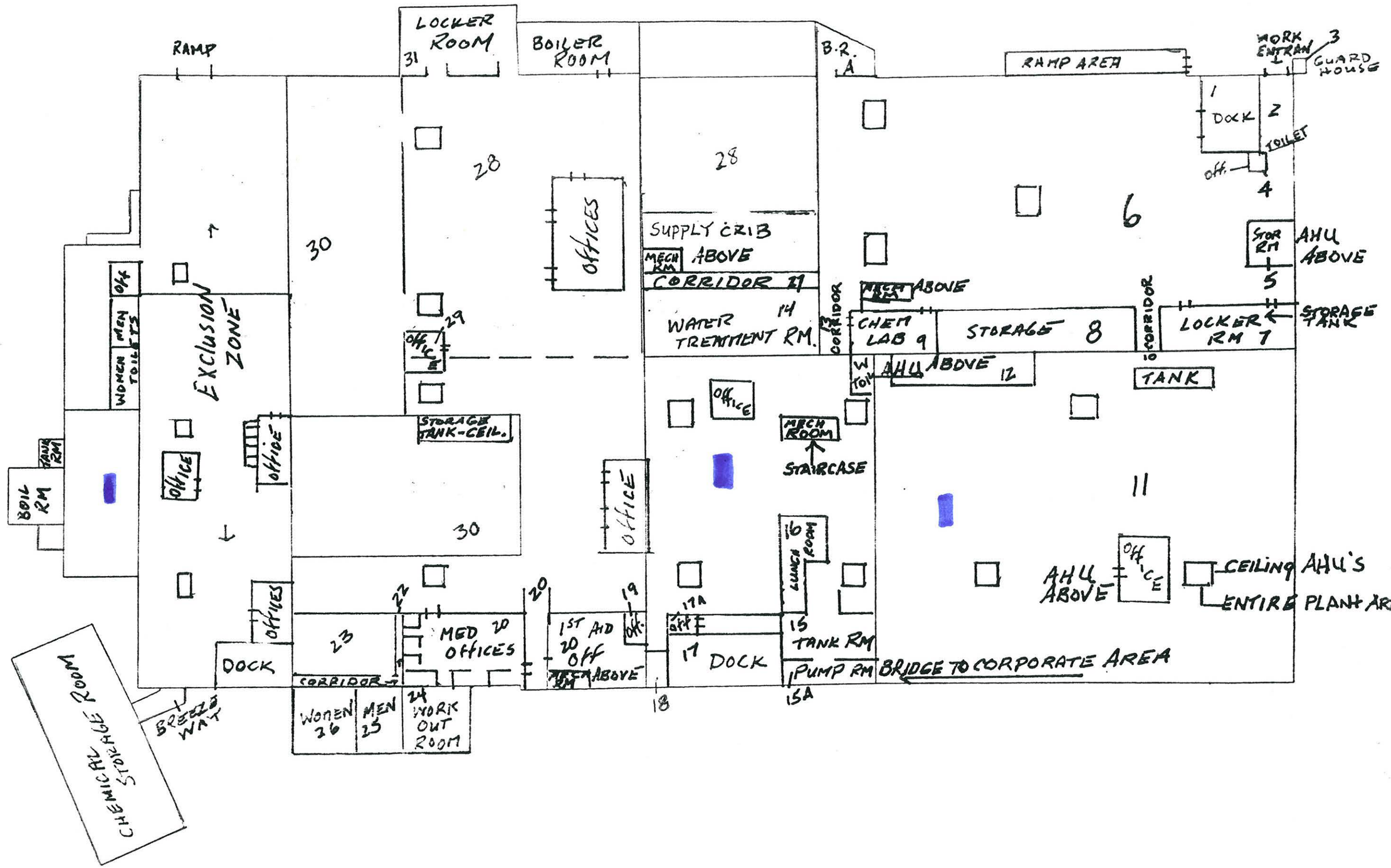
CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-8



DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Furnace Door Gaskets	EDI ENVIRONMENTAL DESIGN INTERNATIONAL inc. 200 S. MICHIGAN AVENUE, SUITE 700 CHICAGO, IL 60604 PHONE: (312)-356-5400	CLIENT: CH2M HILL OMC PLANT 2 100 E. SEA HORSE DRIVE WAUKEGAN, ILLINOIS 60085	FIG. ASB-9
DATE: 10/31/07	PROJ. NO.: 1515.007.01				
DWG. NO.:	DWG.				

N

RAMP

LOCKER ROOM 31

BOILER ROOM

28

30

OFFICES

SUPPLY CRIB

MECH RM ABOVE

CORRIDOR 14

WATER TREATMENT RM.

B.R. A

RAMP AREA

WORK ENTRANCE 3

GUARD HOUSE

1 DOCK 2

TOILET

OFF. 4

6

STOR RM 5

AHU ABOVE

STORAGE TANK

LOCKER RM 7

CORRIDOR 13

MECH RM ABOVE

CHEM LAB 9

STORAGE 8

CORRIDOR 10

W TOIL

AHU ABOVE 12

TANK

OFFICE

MECH ROOM

STAIRCASE

11

OFFICE

AHU ABOVE

CEILING AHU'S

ENTIRE PLANT AREA

LUNCH ROOM 16

17A

OFF

15 TANK RM

17 DOCK

PUMP RM 15A

BRIDGE TO CORPORATE AREA

18

20

19

1ST AID 20 OFF

MED OFFICES 20

22

23

24 WORK OUT ROOM

WOMEN 26

MEN 25

CORRIDOR

DOCK

OFFICES

BREEZE WAY

CHEMICAL STORAGE ROOM

EXCLUSION ZONE

OFFICE

OFFICE

STORAGE TANK-CEIL.

OFFICE 29

O/H

MEN TOILETS

WOMEN TOILETS

TANK RM

BOIL RM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Storage TANKS A&C	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-10

N

RAMP
LOCKER ROOM
31
BOILER ROOM
28
30
OFFICES
SUPPLY CRIB
MECH RM ABOVE
CORRIDOR 14
WATER TREATMENT RM.
29
OFFICE
STORAGE TANK-CEIL.
EXCLUSION ZONE
OFF
MEN TOILETS
WOMEN TOILETS
OFFICE
OFFICE
TANK RM
BOIL RM
B.R. A
RAMP AREA
WORK ENTRANCE 3
GUARD HOUSE
1
DOCK
2
TOILET
off.
4
6
STOR RM
AHU ABOVE
5
MECH RM ABOVE
CORRIDOR
CHEM LAB 9
STORAGE 8
CORRIDOR 10
LOCKER RM 7
STORAGE TANK
W TOR
AHU ABOVE 12
TANK
OFFICE
MECH ROOM
STAIRCASE
11
16
LUNCH ROOM
OFFICE
AHU ABOVE
CEILING AHU'S
ENTIRE PLANT AREA
17A
off
15
TANK RM
17
DOCK
PUMP RM
15A
BRIDGE TO CORPORATE AREA
18
20
19
1ST AID 20
OFF
ABOVE
22
MED 20
OFFICES
OFFICES
23
DOCK
CORRIDOR
WOMEN 26
MEN 25
24
WORK OUT ROOM
BREEZE WAY
CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Heating Unit Insulation	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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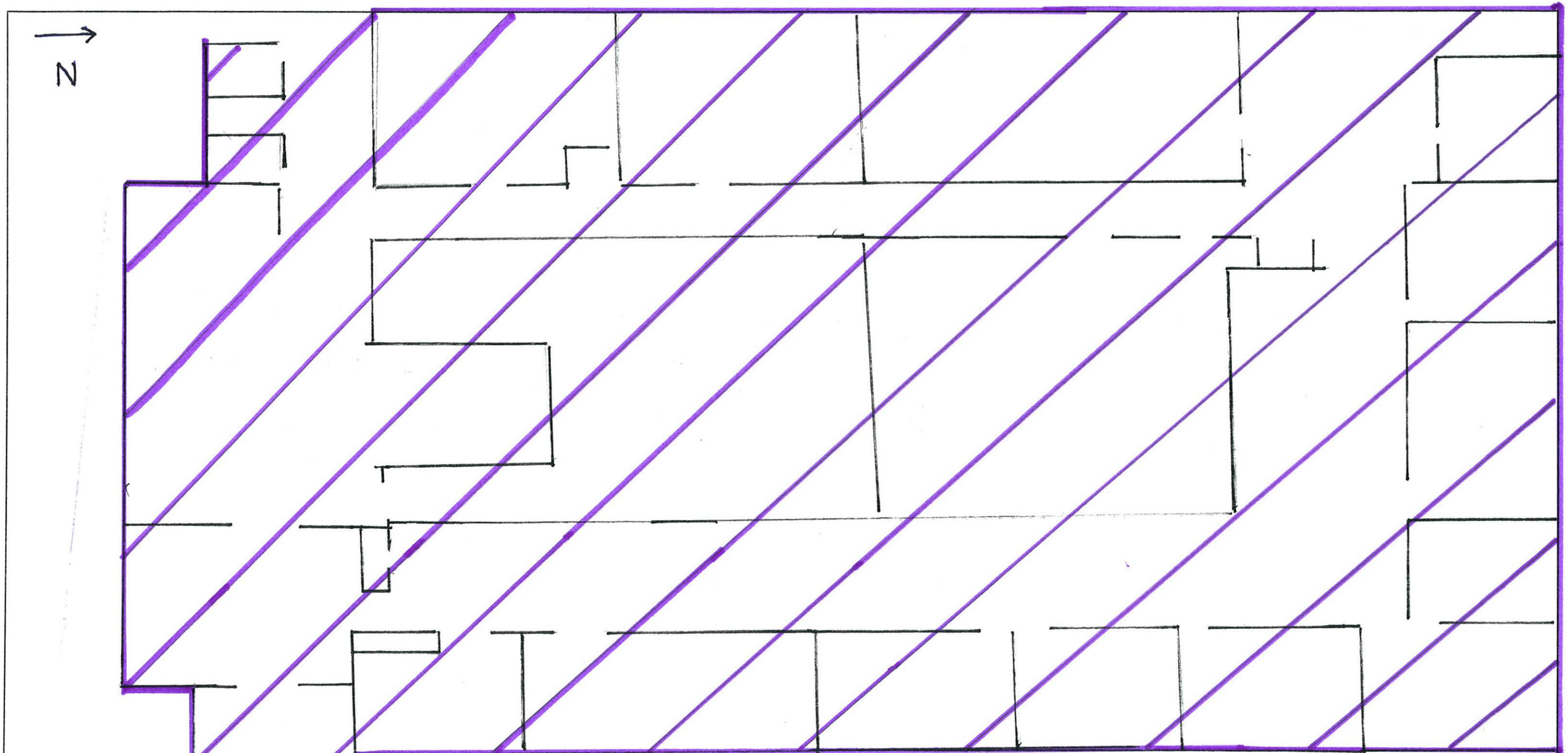
CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-11



DRAWN BY: AM/LWS	APPROVED BY: D.Mc.	TITLE: 2nd Floor Corporate Office Area Thermal System Pipe Insulation & Hard Fittings - 4" & 8"	EDI ENVIRONMENTAL DESIGN INTERNATIONAL inc. 200 S. MICHIGAN AVENUE, SUITE 700 CHICAGO, IL 60604 PHONE: (312)-356-5400	CLIENT: CH2M HILL OMC PLANT 2 100 E. SEA HORSE DRIVE WAUKEGAN, ILLINOIS 60085
DATE: 10\22\2007	PROJ. NO. 1515.007.01			FIG. ASB-12
DWG. NO.:	DWG.			

N

RAMP
LOCKER ROOM
BOILER ROOM
B.R.
RAMP AREA
WORK ENTRANCE
GUARD HOUSE
DOCK
TOILET
OFF.
STOR RM
AHU ABOVE
STORAGE TANK
LOCKER RM 1
TANK
STORAGE TANK-CEIL.
OFFICE
OFFICES
SUPPLY CRIB
MECH RM ABOVE
CORRIDOR
WATER TREATMENT RM.
CHEM LAB 9
STORAGE 8
W TOIL
AHU ABOVE 12
MECH ROOM
STAIRCASE
EXCLUSION ZONE
WOMEN TOILETS
MEN
OFF
BOIL RM
TANK RM
MED OFFICES
1ST AID
LUNCH ROOM
TANK RM
PUMP RM
BRIDGE TO CORPORATE AREA
AHU ABOVE
CEILING AHU'S ENTIRE PLANT AREA
DOCK
CORRIDOR
WOMEN 26
MEN 25
WORK OUT ROOM
BREEZE WAY
CHEMICAL STORAGE ROOM

DRAWN BY: Dm/LWS	APPROVED BY: D.Mc.	TITLE: Transite Material from Electrical Panels	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

EDI ENVIRONMENTAL DESIGN INTERNATIONAL inc.
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CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-13

N

RAMP

LOCKER ROOM

BOILER ROOM

B.R. A

RAMP AREA

WORK ENTRAN 3

GUARD HOUSE

DOCK 1 2

TOILET

OFF. 4

6

STOR RM 5

AHU ABOVE

MECH RM ABOVE

CORRIDOR 9

CHEM LAB 9

STORAGE 8

CORRIDOR 10

LOCKER RM 7

STORAGE TANK

AHU ABOVE 12

TANK

11

SUPPLY CRIB

MECH RM ABOVE

CORRIDOR 14

WATER TREATMENT RM.

28

28

30

31

29

OFFICES

OFFICE

STORAGE TANK-CEIL.

OFFICE

OFFICE

OFFICE

MECH ROOM

STAIRCASE

EXCLUSION ZONE

↑

↓

W/C

MEN TOILETS

WOMEN TOILETS

FAN RM

BOIL RM

OFFICE

OFFICES

DOCK

CORRIDOR

23

22

MED 20 OFFICES

20

1ST AID 20 OFF

19

OFF.

17A

OFF

17

DOCK

16

LUNCH ROOM

15

TANK RM

PUMP RM

15A

18

BRIDGE TO CORPORATE AREA

AHU ABOVE

OFFICE

CEILING AHU'S ENTIRE PLANT AREA

WOMEN 26

MEN 25

24 WORK OUT ROOM

BREEZE WAY

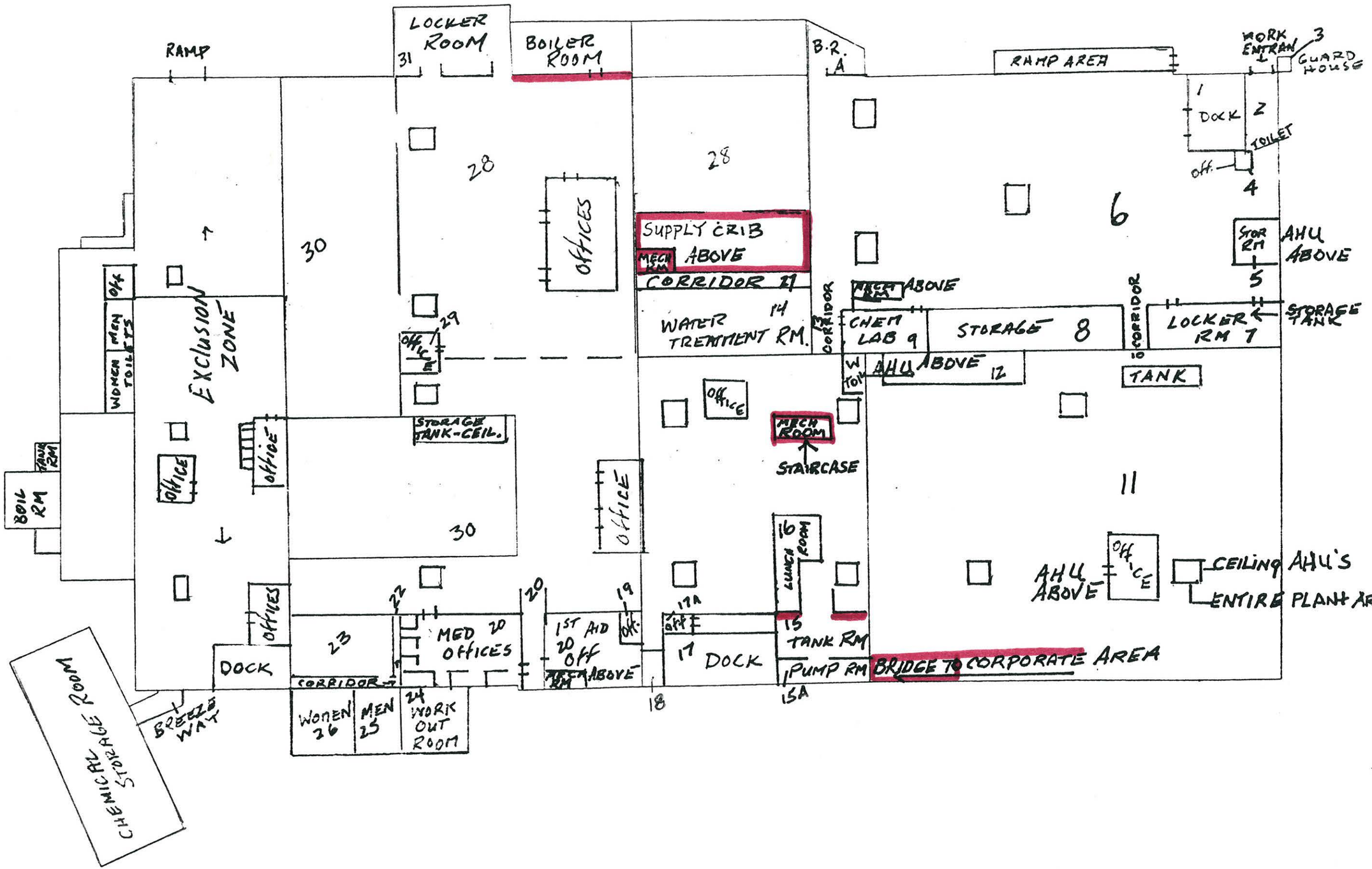
CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Black Lab Table Tops	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

EDI ENVIRONMENTAL DESIGN INTERNATIONAL inc.
200 S. MICHIGAN AVENUE, SUITE 700
CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-14



DRAWN BY: DM/CWS	APPROVED BY: D.Mc.	TITLE: Interior Transite Panels Flat & Corrigated	EDI ENVIRONMENTAL DESIGN INTERNATIONAL inc. 200 S. MICHIGAN AVENUE, SUITE 700 CHICAGO, IL 60604 PHONE: (312)-356-5400
DATE: 10/31/07	PROJ. NO.: 1515.007.01		CLIENT: CH2M HILL OMC PLANT 2 100 E. SEA HORSE DRIVE WAUKEGAN, ILLINOIS 60085
DWG. NO.:	DWG.		FIG. ASB-15

N

LOCKER ROOM
BOILER ROOM
RAMP
31
28
30
29
OFFICES
SUPPLY CRIB
MECH RM ABOVE
CORRIDOR 14
WATER TREATMENT RM.
B.R. A
RAMP AREA
WORK ENTRANCE 3
GUARD HOUSE
1
DOCK
2
TOILET
OFF.
4
6
STOR RM
AHU ABOVE
5
MECH RM ABOVE
CHEM LAB 9
STORAGE 8
LOCKER RM 7
STORAGE TANK
CORRIDOR 13
CORRIDOR 10
W TOIL
AHU ABOVE 12
TANK
OFFICE
MECH ROOM
STAIRCASE
11
O/K
MEN TOILETS
WOMEN TOILETS
EXCLUSION ZONE
TANK RM
BOIL RM
OFFICE
OFFICE
STORAGE TANK-CEIL.
OFFICE
AHU ABOVE
CEILING AHU'S
ENTIRE PLANT AREA
LUNCH ROOM
16
OFFICES
22
20
19
17A
OFF
15
TANK RM
23
MED OFFICES 21
1ST AID 20
OFF
DOCK
CORRIDOR
17
DOCK
PUMP RM
BRIDGE TO CORPORATE AREA
15A
18
WOMEN 26
MEN 25
24 WORK OUT ROOM
BREEZE WAY
CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Exterior Transite Panels Flat & Corrigated	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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200 S. MICHIGAN AVENUE, SUITE 700
CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-16

N

RAMP

LOCKER ROOM

31

BOILER ROOM

B.R. A

RAMP AREA

WORK ENTRANCE 3

GUARD HOUSE

1 DOCK 2

TOILET

OFF. 4

6

STOR RM 5

AHU ABOVE

STORAGE TANK

28

28

OFFICES

SUPPLY CRIB

MECH RM ABOVE

CORRIDOR 13

MECH RM ABOVE

CORRIDOR 10

CHEM LAB 9

STORAGE 8

LOCKER RM 7

WATER TREATMENT RM. 14

W TOIL

AHU ABOVE 12

TANK

OFFICE

MECH ROOM

STAIRCASE

11

O/K

MEN TOILETS

WOMEN TOILETS

EXCLUSION ZONE

29

OFFICE E

STORAGE TANK-CEIL.

TANK RM

BOIL RM

OFFICE

OFFICE

30

OFFICE

16 LUNCH ROOM

AHU ABOVE

OFFICE

CEILING AHU'S

ENTIRE PLANT AREA

22

20

19

17A

OFF.

15 TANK RM

OFFICES

23

MED OFFICES 21

1ST AID 20 OFF

OFF.

17 DOCK

PUMP RM 15A

BRIDGE TO CORPORATE AREA

DOCK

CORRIDOR

18

BREEZE WAY

WOMEN 26

MEN 25

24 WORK OUT ROOM

CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Caulk on Aluminum Siding	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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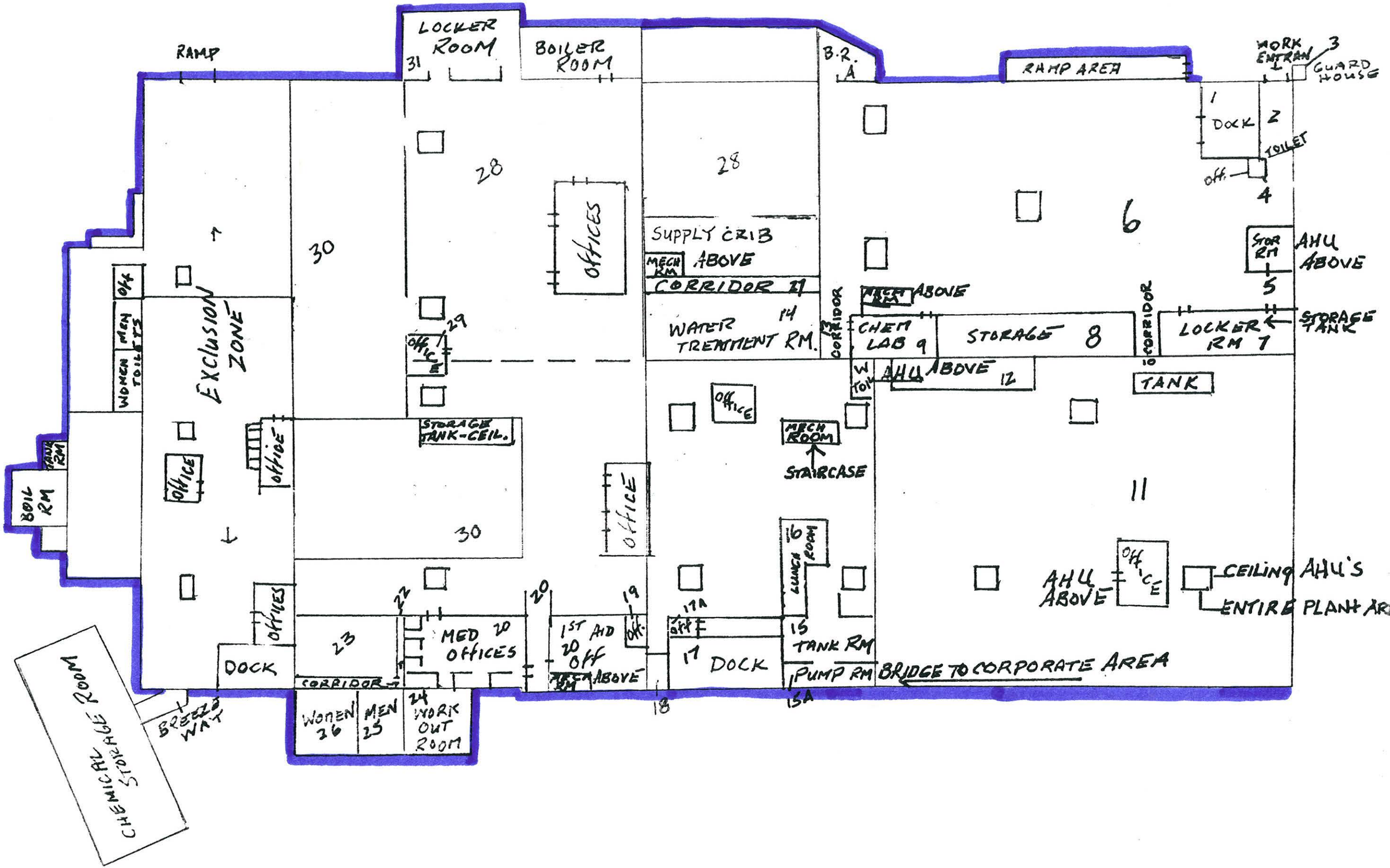
200 S. MICHIGAN AVENUE, SUITE 700
CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-17



DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Caulk and Expansion Joints on Large Concrete Blocks	EDI ENVIRONMENTAL DESIGN INTERNATIONAL inc. 200 S. MICHIGAN AVENUE, SUITE 700 CHICAGO, IL 60604 PHONE: (312)-356-5400	CLIENT: CH2M HILL OMC PLANT 2 100 E. SEA HORSE DRIVE WAUKEGAN, ILLINOIS 60085	FIG. ASB-18
DATE: 10/31/07	PROJ. NO.: 1515.007.01				
DWG. NO.:	DWG.				

N

RAMP

LOCKER ROOM 31

BOILER ROOM

B.R. A

RAMP AREA

WORK ENTRAN L 3

GUARD HOUSE

1 DOCK 2

TOILET

OFF. 4

6

STOR RM 5

AHU ABOVE

STORAGE TANK

28

28

OFFICES

SUPPLY CRIB

MECH RM ABOVE

CORRIDOR 13

MECH RM ABOVE

CHEM LAB 9

STORAGE 8

CORRIDOR 10

LOCKER RM 7

WATER TREATMENT RM. 14

W TOIL

AHU ABOVE 12

TANK

EXCLUSION ZONE

30

OFFICE 29

STORAGE TANK-CEIL.

OFFICE

OFFICE

MECH ROOM

STAIRCASE

11

OFFICE

BOIL RM

TANK RM

OFFICE

OFFICE

30

16 LUNCH ROOM

AHU ABOVE

OFFICE

CEILING AHU'S

ENTIRE PLANT AREA

22

20

19

17A

OFFICES

23

MED OFFICES 20

1ST AID 20 OFF

OFF.

OFF

15 TANK RM

DOCK

CORRIDOR 21

ABOVE

17 DOCK

PUMP RM

BRIDGE TO CORPORATE AREA

WOMEN 26

MEN 25

24 WORK OUT ROOM

18

15A

BREEZE WAY

CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Caulk on Metal Trough & Ventilation Covers	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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200 S. MICHIGAN AVENUE, SUITE 700
CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-19

N

RAMP

LOCKER ROOM

31

BOILER ROOM

B.R. A

RAMP AREA

WORK ENTRANCE 3

GUARD HOUSE

1 DOCK 2

TOILET

off.

4

28

28

OFFICES

SUPPLY CRIB

MECH RM

ABOVE

CORRIDOR 13

6

STOR RM

AHU ABOVE

5

MECH RM ABOVE

CORRIDOR 10

STORAGE TANK

WATER TREATMENT RM. 14

CHEM LAB 9

STORAGE 8

LOCKER RM 7

W. TOIL

AHU ABOVE 12

TANK

O/K

MEN TOILETS

WOMEN TOILETS

EXCLUSION ZONE

29

OFFICE

OFFICE

STORAGE TANK-CEIL.

OFFICE

MECH ROOM

STAIRCASE

11

BOIL RM

TANK RM

OFFICE

30

30

OFFICES

22

20

19

17A

16 LUNCH ROOM

AHU ABOVE

OFFICE

CEILING AHU'S

ENTIRE PLANT AREA

23

MED OFFICES 20

1ST AID 20

OFF

OFF.

OFFICE

15 TANK RM

17 DOCK

PUMP RM

BRIDGE TO CORPORATE AREA

DOCK

CORRIDOR

BREEZE WAY

WOMEN 26

MEN 25

24 WORK OUT ROOM

18

15A

CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Metal Building Roof Drain Caulk	EDI ENVIRONMENTAL DESIGN INTERNATIONAL inc. 200 S. MICHIGAN AVENUE, SUITE 700 CHICAGO, IL 60604 PHONE: (312)-356-5400	CLIENT: CH2M HILL OMC PLANT 2 100 E. SEA HORSE DRIVE WAUKEGAN, ILLINOIS 60085	FIG. ASB-20
DATE: 10/31/07	PROJ. NO.: 1515.007.01				
DWG. NO.:	DWG.				

N

RAMP

LOCKER ROOM 31

BOILER ROOM

B.R. A

RAMP AREA

WORK ENTRANCE 3

GUARD HOUSE

1 DOCK 2

TOILET

OFF. 4

6

STOR RM 5

AHU ABOVE

STORAGE TANK

28

28

OFFICES

SUPPLY CRIB

MECH RM ABOVE

CORRIDOR 13

WATER TREATMENT RM. 14

CORRIDOR

MECH RM ABOVE

CHEM LAB 9

STORAGE 8

CORRIDOR 10

LOCKER RM 7

W TOIL

AHU ABOVE 12

TANK

EXCLUSION ZONE

30

29

OFFICE

STORAGE TANK-CEIL.

OFFICE

OFFICE

MECH ROOM

STAIRCASE

11

BOIL RM

TANK RM

O/K

MEN TOILETS

WOMEN TOILETS

OFFICE

OFFICE

OFFICES

LUNCH ROOM 16

AHU ABOVE

OFFICE

CEILING AHU'S

ENTIRE PLANT AREA

22

20

19

17A

OFF

15

TANK RM

23

MED OFFICES 20

1ST AID 20 OFF

OFF

17 DOCK

PUMP RM

BRIDGE TO CORPORATE AREA

DOCK

CORRIDOR

18

15A

BREEZE WAY

WOMEN 26

MEN 25

24 WORK OUT ROOM

CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Door Caulks
DATE: 10/31/07	PROJ. NO.: 1515.007.01	Overhead Garage Doors, Glass
DWG. NO.:	DWG.	Doors, Regular Doors

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CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-21

N

RAMP

LOCKER ROOM 31

BOILER ROOM

28

28

OFFICES

B.R. A

RAMP AREA

WORK ENTRAN 3

GUARD HOUSE

1 DOCK 2

TOILET

OFF. 4

6

SUPPLY CRIB

MECH RM ABOVE

CORRIDOR 13

WATER TREATMENT RM. 14

STOR RM

AHU ABOVE

5

STORAGE TANK

CORRIDOR

MECH RM ABOVE

CHEM LAB 9

STORAGE 8

10 CORRIDOR

LOCKER RM 1

W TOIL

AHU ABOVE 12

TANK

OFFICE

MECH ROOM

STAIRCASE

11

EXCLUSION ZONE

30

OFFICE

STORAGE TANK-CEIL.

OFFICE

OFFICE

BOIL RM

TANK RM

OFFICE

OFFICES

23

22

MED OFFICES 20

20

1ST AID 20 OFF

19

17A

OFF.

16 LUNCH ROOM

AHU ABOVE

OFFICE

CEILING AHU'S

ENTIRE PLANT AREA

15 TANK RM

17 DOCK

PUMP RM BRIDGE TO CORPORATE AREA

15A

18

DOCK

CORRIDOR

WOMEN 26

MEN 25

24 WORK OUT ROOM

BREEZE WAY

CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Window Glazing on Small Windows	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-22

N

RAMP

LOCKER ROOM

31

BOILER ROOM

28

28

OFFICES

B.R. A

RAMP AREA

WORK ENTRANCE 3

GUARD HOUSE

1

DOCK

2

TOILET

OFF.

4

6

SUPPLY CRIB

MECH RM ABOVE

CORRIDOR 13

MECH RM ABOVE

STOR RM

AHU ABOVE

5

STORAGE TANK

30

EXCLUSION ZONE

O/K

MEN TOILETS

WOMEN TOILETS

OFFICE

OFFICE

OFFICE

29

STORAGE TANK-CEIL.

WATER TREATMENT RM.

14

CHEM LAB 9

STORAGE 8

CORRIDOR 10

LOCKER RM 7

STORAGE TANK

W TOIL

AHU ABOVE 12

TANK

OFFICE

MECH ROOM

STAIRCASE

11

BOIL RM

TANK RM

30

OFFICES

22

20

19

16

LUNCH ROOM

17A

OFF

OFF

OFFICE

AHU ABOVE

CEILING AHU'S

ENTIRE PLANT AREA

23

MED OFFICES 21

1ST AID 20 OFF

15

TANK RM

DOCK

CORRIDOR

17

DOCK

PUMP RM

BRIDGE TO CORPORATE AREA

BREEZE WAY

WOMEN 26

MEN 25

24 WORK OUT ROOM

18

15A

CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Window Caulk - Large Multi-Pane Windows	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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200 S. MICHIGAN AVENUE, SUITE 700
CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-23

N

RAMP

LOCKER ROOM

31

BOILER ROOM

28

28

B.R. A

RAMP AREA

WORK ENTRANCE 3

GUARD HOUSE

1

DOCK

2

TOILET

off.

4

OFFICES

SUPPLY CRIB

MECH RM

ABOVE

CORRIDOR 11

6

STOR RM

AHU ABOVE

5

MECH RM ABOVE

CORRIDOR 13

WATER TREATMENT RM. 14

CHEM LAB 9

STORAGE 8

CORRIDOR 10

LOCKER RM 7

STORAGE TANK

W TOIL

AHU ABOVE 12

TANK

OFFICE

MECH ROOM

STAIRCASE

11

EXCLUSION ZONE

30

29

OFFICE

STORAGE TANK-CEIL.

OFFICE

OFFICE

BOIL RM

TANK RM

OFFICE

OFFICE

16

LUNCH ROOM

AHU ABOVE

OFFICE

CEILING AHU'S

ENTIRE PLANT AREA

22

20

19

17A

OFF

15

TANK RM

23

MED OFFICES 20

1ST AID 20

OFF

ABOVE

17

DOCK

PUMP RM

BRIDGE TO CORPORATE AREA

DOCK

CORRIDOR

18

15A

WOMEN 26

MEN 25

24 WORK OUT ROOM

BREEZE WAY

CHEMICAL STORAGE ROOM

DRAWN BY: DM/LWS	APPROVED BY: D.Mc.	TITLE: Gasket on Exterior Up Right Tank	
DATE: 10/31/07	PROJ. NO.: 1515.007.01		
DWG. NO.:	DWG.		

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200 S. MICHIGAN AVENUE, SUITE 700
CHICAGO, IL 60604 PHONE: (312)-356-5400

CLIENT: CH2M HILL
OMC PLANT 2
100 E. SEA HORSE DRIVE
WAUKEGAN, ILLINOIS 60085

FIG. ASB-24